=> fil capl; d que l71; fil biosis; d que l69; fil medl; d que l104; dup rem l104,l71,l69
FILE 'CAPLUS' ENTERED AT 15:35:47 ON 28 JUN 95
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FILE COVERS 1967 - 28 Jun 1995 VOL 122 ISS 26
FILE LAST UPDATED: 28 Jun 1995 (950628/ED)

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authors

L1	687	SEA	FILE=CAPLUS ROBINSON H?/AU
L2	11	SEA	FILE=CAPLUS FYNAN E?/AU
L4	584	SEA	FILE=CAPLUS WEBSTER R?/AU
L6	9229	SEA	FILE=CAPLUS VACCINES/CT
L7	340583	SEA	FILE=CAPLUS DNA OR DEOXYRIBONUCL?
L8	135	SEA	FILE=CAPLUS L6(L)L7
L70	1292	SEA	FILE=CAPLUS LU S?/AU
L71	5	SEA	FILE=CAPLUS L8 AND (L70 OR L1 OR L2 OR L4)

FILE 'BIOSIS' ENTERED AT 15:35:48 ON 28 JUN 95

FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 26 June 1995 (950626/ED)
CAS REGISTRY NUMBERS (R) LAST ADDED: 26 June 1995 (950626/UP)

As of December 31, 1993 the BIOSIS File will be updated weekly with information from both publications. SDIs will now be run weekly. For more information enter HELP UPDATE and HELP COST at an arrow prompt(=>).

L42	1182	SEA	FILE=BIOSIS ROBINSON H?/AU
L43	12	SEA	FILE=BIOSIS FYNAN E?/AU
L44	952	SEA	FILE=BIOSIS WEBSTER R?/AU
L47	372449	SEA	FILE=BIOSIS DNA
L48	39738	SEA	FILE=BIOSIS VACCINE#
L49	620	SEA	FILE=BIOSIS L47(5A)L48
L68	656	SEA	FILE=BIOSIS LU S?/AU
L69	10	SEA	FILE=BIOSIS (L42 OR L43 OR L44 OR L68) AND L49

FILE 'MEDLINE' ENTERED AT 15:35:49 ON 28 JUN 95

FILE LAST UPDATED: 21 JUN 1995 (950621/UP). FILE COVERS 1966 TO DATE.
+QLF/CT SHOWS YOU THE ALLOWABLE QUALIFIERS OF A TERM.

MEDLINE, CANCERLIT AND PDQ ERRONEOUSLY ANNOTATED CERTAIN ARTICLES AUTHORED OR CO-AUTHORED BY DR. BERNARD FISHER WITH THE PHRASE

"SCIENTIFIC MISCONDUCT-DATA TO BE REANALYZED." ALL SUCH ANNOTATIONS HAVE BEEN REMOVED OR ARE BEING REMOVED. WE APOLOGIZE FOR ANY PROBLEMS OR CONCERNS THIS MAY HAVE CAUSED. USERS SHOULD DISREGARD THOSE PRIOR ANNOTATIONS.

```
L72          521 SEA FILE=MEDLINE ROBINSON H?/AU
L73            6 SEA FILE=MEDLINE FYNAN E?/AU
L74          712 SEA FILE=MEDLINE WEBSTER R?/AU
L75          442 SEA FILE=MEDLINE LU S?/AU
L79          215 SEA FILE=MEDLINE DNA (3A)VACCINE#
L80        25748 SEA FILE=MEDLINE VIRAL VACCINES+NT/CT
L81         2828 SEA FILE=MEDLINE VACCINES, SYNTHETIC+NT/CT
L82        36478 SEA FILE=MEDLINE DNA, VIRAL+NT/CT
L83          345 SEA FILE=MEDLINE L82 AND (L80 OR L81)
L104           6 SEA FILE=MEDLINE (L75 OR L74 OR L73 OR L72) AND (L83 OR L
                 79)


FILE 'MEDLINE' ENTERED AT 15:35:54 ON 28 JUN 95

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PROCESSING COMPLETED FOR L104
PROCESSING COMPLETED FOR L71
PROCESSING COMPLETED FOR L69
L124          15 DUP REM L104 L71 L69 (6 DUPLICATES REMOVED)

=> d bib l124 1-15

L124 ANSWER 1 OF 15  MEDLINE                                  DUPLICATE 1
AN   95221907     MEDLINE
TI   Protective CTL-dependent immunity and enhanced immunopathology in
     mice immunized by particle bombardment with DNA encoding an internal
     virion protein.
AU   Zarozinski C C; Fynan E F; Selin L K; Robinson H L
     ; Welsh R M
CS   Department of Pathology, University of Massachusetts Medical Center,
     Worcester 01605, USA.
NC   AR35506 (NIAMS)
     AI07349 (NIAID)
     AI07272 (NIAID)
     +
SO   J Immunol, (1995 Apr 15) 154 (8) 4010-7.
     Journal code: IFB. ISSN: 0022-1767.
CY   United States
DT   Journal; Article; (JOURNAL ARTICLE)
LA   English
FS   Abridged Index Medicus Journals; Priority Journals; Cancer Journals
EM   9507

L124 ANSWER 2 OF 15  BIOSIS  COPYRIGHT 1995 BIOSIS
AN  95:190410  BIOSIS
```

DN 98204710
TI **DNA vaccines:** Longevity of an anti-influenza response.
AU Santoro J C; **Fynan E M; Robinson H L**
CS Dep. Pathol., Univ. Mass. Med. Cent., Worcester, MA 01655, USA
SO Keystone Symposium on Molecular Aspects of Viral Immunity, Keystone, Colorado, USA, January 16-23, 1995. Journal of Cellular Biochemistry Supplement 0 (19A). 1995. 313. ISSN: 0733-1959
DT Conference
LA English

L124 ANSWER 3 OF 15 BIOSIS COPYRIGHT 1995 BIOSIS
AN 95:190397 BIOSIS
DN 98204697
TI **DNA vaccines:** Dose-response analyses for different routes of inoculation.
AU Feltquate D M; Morin M J; **Robinson H L**
CS Dep. Pathol., Univ. Mass. Med. Cent., Worcester, MA 01655, USA
SO Keystone Symposium on Molecular Aspects of Viral Immunity, Keystone, Colorado, USA, January 16-23, 1995. Journal of Cellular Biochemistry Supplement 0 (19A). 1995. 310. ISSN: 0733-1959
DT Conference
LA English

L124 ANSWER 4 OF 15 BIOSIS COPYRIGHT 1995 BIOSIS
AN 95:190392 BIOSIS
DN 98204692
TI **DNA vaccines:** Effects of dosing schedule on antibody responses.
AU Boyle C M; Morin M J; **Robinson H L**
CS Dep. Pathol., Univ. Mass. Med. Cent., Worcester, MA 01655, USA
SO Keystone Symposium on Molecular Aspects of Viral Immunity, Keystone, Colorado, USA, January 16-23, 1995. Journal of Cellular Biochemistry Supplement 0 (19A). 1995. 309. ISSN: 0733-1959
DT Conference
LA English

L124 ANSWER 5 OF 15 BIOSIS COPYRIGHT 1995 BIOSIS
AN 95:190141 BIOSIS
DN 98204441
TI **DNA vaccines**, a new approach to immunization.
AU **Robinson H L; Lu S**; Feltquate D; **Webster R G**; Haynes J R
CS Dep. Pathol., Univ. Mass. Med. Center, Worcester, MA 01655, USA
SO Keystone Symposium on Mucosal Immunity: New Strategies for Protection Against Viral and Bacterial Pathogens, Keystone, Colorado, USA, January 16-23, 1995. Journal of Cellular Biochemistry Supplement 0 (19A). 1995. 239. ISSN: 0733-1959
DT Conference
LA English

L124 ANSWER 6 OF 15 MEDLINE
AN 95266301 MEDLINE
TI Use of DNAs expressing HIV-1 Env and noninfectious HIV-1 particles to raise antibody responses in mice.
AU **Lu S**; Santoro J C; Fuller D H; Haynes J R; **Robinson H L**

CS Department of Pathology, University of Massachusetts Medical Center, Worcester 01655, USA.
NC RO1 AI34241 (NIAID)
SO Virology, (1995 May 10) 209 (1) 147-54.
Journal code: XEA. ISSN: 0042-6822.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9508

L124 ANSWER 7 OF 15 CAPLUS COPYRIGHT 1995 ACS
AN 1995:560601 CAPLUS
DN 122:312554
TI DNA vaccines: a novel approach to immunization
AU **Fynan, Ellen F.**; **Webster, Robert G.**; Fuller, Deborah H.; Haynes, Joel R.; Santoro, Joseph C.; **Robinson, Harriet L.**
CS Dep. of Pathology, Univ. of Massachusetts Medical School, Worcester, MA, 01655, USA
SO Int. J. Immunopharmacol. (1995), 17(2), 79-83
CODEN: IJIMDS; ISSN: 0192-0561
DT Journal
LA English

L124 ANSWER 8 OF 15 MEDLINE DUPLICATE 2
AN 95185103 MEDLINE
TI Protection of ferrets against influenza challenge with a **DNA vaccine** to the haemagglutinin.
AU **Webster R G**; **Fynan E F**; Santoro J C; **Robinson H**
CS Department of Virology and Molecular Biology, St Jude Children's Research Hospital, Memphis TN 38101-0318.
NC AI-08831 (NIAID)
AI-34946 (NIAID)
CA-21765 (NCI)
SO Vaccine, (1994 Dec) 12 (16) 1495-8.
Journal code: X6O. ISSN: 0264-410X.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9506

L124 ANSWER 9 OF 15 BIOSIS COPYRIGHT 1995 BIOSIS
AN 95:1919 BIOSIS
DN 98016219
TI **DNA vaccine**: Anti-SIV immune responses rhesus macaques.
AU **Lu S**; **Robinson H L**
CS Dep. Pathol., Univ. Mass. Med. Cent., Worcester, MA 01655, USA
SO 12th Annual Symposium on Nonhuman Primate Models for AIDS, Boston, Massachusetts, USA, October 12-15, 1994. Journal of Medical Primatology 23 (4). 1994. 268. ISSN: 0047-2565
DT Conference
LA English

L124 ANSWER 10 OF 15 CAPLUS COPYRIGHT 1995 ACS
AN 1994:653236 CAPLUS
DN 121:253236
TI Gene-gun-mediated DNA immunization elicits humoral, cytotoxic, and protective immune responses
AU Haynes, Joel R.; Eisenbraun, Michael D.; Fuller, Deborah H.; **Fynan, Ellen F.; Robinson, Harriet L.**
CS Agracetus Inc., Middleton, WI, 53562, USA
SO Vaccines 94: Mod. Approaches New Vaccines Incl. Prev. AIDS, [Annu. Meet.], 11th (1994), Meeting Date 1993, 65-70. Editor(s): Norrby, Erling. Publisher: Cold Spring Harbor Lab. Press, Cold Spring Harboy, N.Y.
CODEN: 60PMAJ
DT Conference
LA English

L124 ANSWER 11 OF 15 BIOSIS COPYRIGHT 1995 BIOSIS
AN 95:90748 BIOSIS
DN 98105048
TI **DNA vaccines**, protective immunizations by parenteral, mucosal, and gene gun inoculations.
AU **Robinson H L; Fynan E F; Lu S;** Santoro J C; **Webster R G;** Haynes J R
CS Dep. Pathol., Univ. Mass. Med. Sch., 55 Lake Ave. N., Worcester, MA 01655, USA
SO Sixth Annual Meeting of the National Cooperative Vaccine Development Groups for AIDS on Advances in AIDS Vaccine Development, Alexandria, Virginia, USA, October 30-November 4, 1993. AIDS Research and Human Retroviruses 10 (SUPPL. 2). 1994. S53. ISSN: 0889-2229
DT Conference
LA English

L124 ANSWER 12 OF 15 MEDLINE DUPLICATE 3
AN 94089656 MEDLINE
TI **DNA vaccines**: protective immunizations by parenteral, mucosal, and gene-gun inoculations.
AU **Fynan E F; Webster R G;** Fuller D H; Haynes J R; Santoro J C; **Robinson H L**
CS Department of Pathology, University of Massachusetts Medical School, Worcester 01655.
NC R01 CA23086 (NCI)
R01 AI08831 (NIAID)
CA21765 (NCI)
SO Proc Natl Acad Sci U S A, (1993 Dec 15) 90 (24) 11478-82.
Journal code: PV3. ISSN: 0027-8424.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 9403

L124 ANSWER 13 OF 15 MEDLINE
AN 94025910 MEDLINE
TI Protection against a lethal influenza virus challenge by immunization with a haemagglutinin-expressing plasmid DNA.
AU **Robinson H L;** Hunt L A; **Webster R G**
CS Department of Pathology, University of Massachusetts Medical School,

Worcester 01655.
NC RO1 CA 23086 (NCI)
RO1 AI 08831 (NIAID)
SO Vaccine, (1993) 11 (9) 957-60.
Journal code: X60. ISSN: 0264-410X.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9401

L124 ANSWER 14 OF 15 MEDLINE
AN 94030613 MEDLINE
TI Use of DNA encoding influenza hemagglutinin as an avian influenza vaccine.
AU **Fynan E F; Robinson H L; Webster R G**
CS Department of Pathology, University of Massachusetts Medical School, Worcester 01655.
NC RO1 CA 23086 (NCI)
RO1 AI 08831 (NIAID)
CA-21765 (NCI)
SO DNA Cell Biol, (1993 Nov) 12 (9) 785-9.
Journal code: AF9. ISSN: 1044-5498.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9402

L124 ANSWER 15 OF 15 CAPLUS COPYRIGHT 1995 ACS DUPLICATE 4
AN 1993:647435 CAPLUS
DN 119:247435
TI Use of direct DNA inoculations to elicit protective immune responses
AU **Robinson, Hariet L.; Fynan, Ellen F.; Webster, Robert G.**
CS Med. Cent., Univ. Massachusetts, Worcester, MA, 01655, USA
SO Vaccines 93, [Annu. Meet.], 10th (1993), Meeting Date 1992, 311-15.
Editor(s): Ginsberg, Harold S. Publisher: Cold Spring Harbor Lab., Cold Spring Harbor, N. Y.
CODEN: 59HUAJ
DT Conference
LA English

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=> fil capl; d que l14; d que l17; d que l28; d que l136; d que l41; d que
l139
FILE 'CAPLUS' ENTERED AT 16:22:47 ON 28 JUN 95
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FILE COVERS 1967 - 28 Jun 1995  VOL 122 ISS 26
FILE LAST UPDATED: 28 Jun 1995  (950628/ED)

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  HCAplus file when using the FSEARCH command or when conducting
  SmartSELECT searches with large numbers of terms.


L6          9229 SEA FILE=CAPLUS VACCINES/CT
L7        340583 SEA FILE=CAPLUS DNA OR DEOXYRIBONUCL?
L9         67537 SEA FILE=CAPLUS TRANSCRIPTION
L12           13 SEA FILE=CAPLUS (L9(S)L7) AND L6
L13        56470 SEA FILE=CAPLUS PROMOTER
L14            5 SEA FILE=CAPLUS L12 AND L13


L6          9229 SEA FILE=CAPLUS VACCINES/CT
L9         67537 SEA FILE=CAPLUS TRANSCRIPTION
L17            3 SEA FILE=CAPLUS L6(L)L9


L6          9229 SEA FILE=CAPLUS VACCINES/CT
L18         9386 SEA FILE=CAPLUS MICROSPHERE#
L20        37342 SEA FILE=CAPLUS MUCOSA# OR MUCUS
L22         2751 SEA FILE=CAPLUS ENCAPSULATION (L)MICRO
L23         1437 SEA FILE=CAPLUS SPHERE#(L)MICRO
L24          141 SEA FILE=CAPLUS (L18 OR L22 OR L23) AND L20
L25           18 SEA FILE=CAPLUS L24 AND L6
L27           19 SEA FILE=CAPLUS L20(W)DELIVERY
L28            3 SEA FILE=CAPLUS L25 AND L27


L7        340583 SEA FILE=CAPLUS DNA OR DEOXYRIBONUCL?
L18         9386 SEA FILE=CAPLUS MICROSPHERE#
L22         2751 SEA FILE=CAPLUS ENCAPSULATION (L)MICRO
L23         1437 SEA FILE=CAPLUS SPHERE#(L)MICRO
L32        25589 SEA FILE=CAPLUS DELIVERY
L135         390 SEA FILE=CAPLUS L7(S)L32
L136           4 SEA FILE=CAPLUS (L18 OR L22 OR L23)(L)L135


L6          9229 SEA FILE=CAPLUS VACCINES/CT
L7        340583 SEA FILE=CAPLUS DNA OR DEOXYRIBONUCL?
L8           135 SEA FILE=CAPLUS L6(L)L7
L34        25993 SEA FILE=CAPLUS HIV OR ((HUMAN OR SIMIAN) (1W) IMMUNODEFI
                 C?) OR SIV OR INFLUENZA OR ROTAVIR?
L36           15 SEA FILE=CAPLUS L8 (L) L34
L40       117849 SEA FILE=CAPLUS DEOXYRIBONUCLEIC ACIDS/CT
L41            7 SEA FILE=CAPLUS L36 AND L40
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L6          9229 SEA FILE=CAPLUS VACCINES/CT
L7        340583 SEA FILE=CAPLUS DNA OR DEOXYRIBONUCL?
L8           135 SEA FILE=CAPLUS L6(L)L7
L76           17 SEA FILE=CAPLUS GENE GUN#
L139           1 SEA FILE=CAPLUS L8(L)L76

=> s (l14 or l17 or l28 or l136 or l41 or l139) not l71
L140          20 (L14 OR L17 OR L28 OR L136 OR L41 OR L139) NOT L71

=> fil biosis;d que l57; d que l61; d que l64; d que l66; d his l127
FILE 'BIOSIS' ENTERED AT 16:24:23 ON 28 JUN 95
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FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 26 June 1995 (950626/ED)
CAS REGISTRY NUMBERS (R) LAST ADDED: 26 June 1995 (950626/UP)

As of December 31, 1993 the BIOSIS File will be updated weekly with
information from both publications.  SDIs will now be run weekly.  For
more information enter HELP UPDATE and HELP COST at an arrow
prompt(=>).


L47       372449 SEA FILE=BIOSIS DNA
L48        39738 SEA FILE=BIOSIS VACCINE#
L49          620 SEA FILE=BIOSIS L47(5A)L48
L50        73585 SEA FILE=BIOSIS TRANSCRIPTION
L51        40083 SEA FILE=BIOSIS PROMOTER
L57            5 SEA FILE=BIOSIS L49 AND (L50 AND L51)


L47       372449 SEA FILE=BIOSIS DNA
L48        39738 SEA FILE=BIOSIS VACCINE#
L49          620 SEA FILE=BIOSIS L47(5A)L48
L50        73585 SEA FILE=BIOSIS TRANSCRIPTION
L51        40083 SEA FILE=BIOSIS PROMOTER
L56           30 SEA FILE=BIOSIS L49 AND (L50 OR L51)
L58        97532 SEA FILE=BIOSIS HIV OR ((HUMAN OR SIMIAN) (1W) IMMUNODEFI
                 C?) OR SIV OR INFLUENZA OR ROTAVIR?
L61            4 SEA FILE=BIOSIS L56 AND L58


L47       372449 SEA FILE=BIOSIS DNA
L48        39738 SEA FILE=BIOSIS VACCINE#
L49          620 SEA FILE=BIOSIS L47(5A)L48
L62         8727 SEA FILE=BIOSIS MICROSPHERE#
L64            1 SEA FILE=BIOSIS L49 AND L62


L47       372449 SEA FILE=BIOSIS DNA
L48        39738 SEA FILE=BIOSIS VACCINE#
L49          620 SEA FILE=BIOSIS L47(5A)L48
L65           17 SEA FILE=BIOSIS GENE GUN#
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previously printed (authors)

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L66             5 SEA FILE=BIOSIS L49 AND L65


     (FILE 'BIOSIS' ENTERED AT 15:40:44 ON 28 JUN 95)
L127           10 S (L57 OR L61 OR L64 OR L66) NOT L69

=> fil medl; d que 189; d que 193; d que 194; d que l100; d que l128; d
his l128
FILE 'MEDLINE' ENTERED AT 16:25:04 ON 28 JUN 95

 FILE LAST UPDATED: 21 JUN 1995 (950621/UP). FILE COVERS 1966 TO DATE.
 +QLF/CT SHOWS YOU THE ALLOWABLE QUALIFIERS OF A TERM.

 MEDLINE, CANCERLIT AND PDQ ERRONEOUSLY ANNOTATED CERTAIN ARTICLES
 AUTHORED OR CO-AUTHORED BY DR. BERNARD FISHER WITH THE PHRASE
 "SCIENTIFIC MISCONDUCT-DATA TO BE REANALYZED." ALL SUCH ANNOTATIONS
 HAVE BEEN REMOVED OR ARE BEING REMOVED. WE APOLOGIZE FOR ANY PROBLEMS
 OR CONCERNS THIS MAY HAVE CAUSED. USERS SHOULD DISREGARD THOSE PRIOR
 ANNOTATIONS.


L79           215 SEA FILE=MEDLINE DNA (3A)VACCINE#
L80         25748 SEA FILE=MEDLINE VIRAL VACCINES+NT/CT
L81          2828 SEA FILE=MEDLINE VACCINES, SYNTHETIC+NT/CT
L82         36478 SEA FILE=MEDLINE DNA, VIRAL+NT/CT
L83           345 SEA FILE=MEDLINE L82 AND (L80 OR L81)
L88             7 SEA FILE=MEDLINE GENE GUN#
L89             4 SEA FILE=MEDLINE (L83 OR L79) AND L88


L79           215 SEA FILE=MEDLINE DNA (3A)VACCINE#
L80         25748 SEA FILE=MEDLINE VIRAL VACCINES+NT/CT
L81          2828 SEA FILE=MEDLINE VACCINES, SYNTHETIC+NT/CT
L82         36478 SEA FILE=MEDLINE DNA, VIRAL+NT/CT
L83           345 SEA FILE=MEDLINE L82 AND (L80 OR L81)
L84            24 SEA FILE=MEDLINE L79 AND L83
L90         36148 SEA FILE=MEDLINE PROMOTER
L91         73963 SEA FILE=MEDLINE TRANSCRIPTION
L93             1 SEA FILE=MEDLINE L84 AND (L90 OR L91)


L79           215 SEA FILE=MEDLINE DNA (3A)VACCINE#
L80         25748 SEA FILE=MEDLINE VIRAL VACCINES+NT/CT
L81          2828 SEA FILE=MEDLINE VACCINES, SYNTHETIC+NT/CT
L82         36478 SEA FILE=MEDLINE DNA, VIRAL+NT/CT
L83           345 SEA FILE=MEDLINE L82 AND (L80 OR L81)
L90         36148 SEA FILE=MEDLINE PROMOTER
L91         73963 SEA FILE=MEDLINE TRANSCRIPTION
L94             3 SEA FILE=MEDLINE (L83 OR L79) AND L90 AND L91


L79           215 SEA FILE=MEDLINE DNA (3A)VACCINE#
L80         25748 SEA FILE=MEDLINE VIRAL VACCINES+NT/CT
L81          2828 SEA FILE=MEDLINE VACCINES, SYNTHETIC+NT/CT
L82         36478 SEA FILE=MEDLINE DNA, VIRAL+NT/CT
L83           345 SEA FILE=MEDLINE L82 AND (L80 OR L81)
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L84          24 SEA FILE=MEDLINE L79 AND L83
L95       45426 SEA FILE=MEDLINE HIV
L96        1269 SEA FILE=MEDLINE SIV
L97       20907 SEA FILE=MEDLINE INFLUENZA
L98        4428 SEA FILE=MEDLINE ROTAVIR?
L100          6 SEA FILE=MEDLINE L84 AND (L97 OR L98 OR L95 OR L96)


L72         521 SEA FILE=MEDLINE ROBINSON H?/AU
L73           6 SEA FILE=MEDLINE FYNAN E?/AU
L74         712 SEA FILE=MEDLINE WEBSTER R?/AU
L75         442 SEA FILE=MEDLINE LU S?/AU
L79         215 SEA FILE=MEDLINE DNA (3A) VACCINE#
L80       25748 SEA FILE=MEDLINE VIRAL VACCINES+NT/CT
L81        2828 SEA FILE=MEDLINE VACCINES, SYNTHETIC+NT/CT
L82       36478 SEA FILE=MEDLINE DNA, VIRAL+NT/CT
L83         345 SEA FILE=MEDLINE L82 AND (L80 OR L81)
L84          24 SEA FILE=MEDLINE L79 AND L83
L88           7 SEA FILE=MEDLINE GENE GUN#
L89           4 SEA FILE=MEDLINE (L83 OR L79) AND L88
L90       36148 SEA FILE=MEDLINE PROMOTER
L91       73963 SEA FILE=MEDLINE TRANSCRIPTION
L93           1 SEA FILE=MEDLINE L84 AND (L90 OR L91)
L94           3 SEA FILE=MEDLINE (L83 OR L79) AND L90 AND L91
L95       45426 SEA FILE=MEDLINE HIV
L96        1269 SEA FILE=MEDLINE SIV
L97       20907 SEA FILE=MEDLINE INFLUENZA
L98        4428 SEA FILE=MEDLINE ROTAVIR?
L100          6 SEA FILE=MEDLINE L84 AND (L97 OR L98 OR L95 OR L96)
L104          6 SEA FILE=MEDLINE (L75 OR L74 OR L73 OR L72) AND (L83 OR L
                79)
L128          8 SEA FILE=MEDLINE (L89 OR L93 OR L94 OR L100) NOT L104


     (FILE 'MEDLINE' ENTERED AT 15:42:38 ON 28 JUN 95)
L128          8 S (L89 OR L93 OR L94 OR L100) NOT L104

=> dup rem l128,l140,l127
FILE 'MEDLINE' ENTERED AT 16:25:42 ON 28 JUN 95

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PROCESSING COMPLETED FOR L128
PROCESSING COMPLETED FOR L140
PROCESSING COMPLETED FOR L127
L141         36 DUP REM L128 L140 L127 (2 DUPLICATES REMOVED)

=> d bib ab l141 1-36

L141 ANSWER 1 OF 36  CAPLUS  COPYRIGHT 1995 ACS
AN   1995:543716  CAPLUS
DN   122:274035
```

previously (in last)

TI Vaccine and process for producing the same
IN Nerome, Kuniaki; Chiba, Mitsuru; Endo, Atsushi
PA Nisshin OIl Mills, Ltd., Japan; Daiichi Pharmaceutical Co., Ltd.
SO PCT Int. Appl., 20 pp.
CODEN: PIXXD2
PI WO 9507099 A1 950316
DS W: CA, CN, FI, JP, KR, NO, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, NL, PT, SE
AI WO 94-JP1469 940906
PRAI JP 93-248660 930909
DT Patent
LA Japanese
AB A vaccine comprise a vaccinia virus which is a vector having, incorporated thereinto, a base sequence coding for part of the whole of the HA protein of an influenza virus and another base sequence coding for part or the whole of a pathogen-derived substance. It is possible to incorporate into a vector a base sequence obtained, for example, by inserting a base sequence which codes for the envelope protein gp120 or gp160 of an HIV and contains at least 24 base units into a DNA coding for the loop region of the HA protein of an influenza virus. Also provided are a process for producing the vaccine and a method of forming cellular immunity with the vaccine.

L141 ANSWER 2 OF 36 BIOSIS COPYRIGHT 1995 BIOSIS
AN 95:135359 BIOSIS
DN 98149659
TI Development of a bovine adenovirus type 3-based expression vector.
AU Mittal S K; Prevec L; Graham F L; Babiuk L A
CS Vet. Infectious Dis. Organization, Univ. Saskatchewan, Saskatoon, SK S7N 0W0, Canada
SO Journal of General Virology 76 (1). 1995. 93-102. ISSN: 0022-1317
LA English
AB We constructed a non-defective bovine adenovirus type 3 recombinant (BAd3-Luc) containing the firefly luciferase gene inserted in the early region 3 (E3) of the BAd3 genome. Deletion of a 696 bp XhoI-NcoI E3 segment and insertion of the luciferase gene in E3 was confirmed by Southern blot analyses. Luciferase was expressed in Madin-Darby bovine kidney cells infected with BAd3-Luc as measured by enzymic assays and Western blotting. Analyses of luciferase expression in the presence or absence of 1-beta-D-arabinofuranosylcytosine indicated that approximately 70-75% of luciferase expression was dependent on viral DNA replication, suggesting that **transcription** of the gene was at least partially under the control of a late **promoter**. Although yields of infectious virus for BAd3-Luc were approximately 10-fold lower than for wild-type virus, replication of the vector was still relatively efficient. In a Western blot experiment, anti-luciferase antibody reacted with a 62 kDa protein which is of the same molecular mass as the purified firefly luciferase polypeptide. Luciferase was also expressed in the 293 cell line infected with BAd3-Luc for at least 6 days postinfection as monitored by luciferase assays. Based on these observations we suggest that BAd-based expression vectors should have excellent potential for the development of recombinant vaccines for cattle and may also be suitable as vectors for gene transfer into human cells.

L141 ANSWER 3 OF 36 CAPLUS COPYRIGHT 1995 ACS

AN 1995:364298 CAPLUS
DN 122:142569
TI Therapeutic drug delivery systems comprising gas-filled microspheres
IN Unger, Evan C.; Fritz, Thomas A.; Matsunaga, Terry; Ramaswami, Varadarajan; Yellowhair, David; Wu, Guanli
PA USA
SO PCT Int. Appl., 122 pp.
CODEN: PIXXD2
PI WO 9428873 A1 941222
DS W: AU, CA, CN, JP
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
AI WO 94-US5620 940512
PRAI US 93-76250 930611
DT Patent
LA English
AB Therapeutic drug delivery systems comprising gas-filled microspheres comprising a therapeutic are described. Methods for employing such microspheres in therapeutic drug delivery applications are also provided. Drug delivery systems comprising gas-filled liposomes having encapsulated therein a drug are preferred. Methods of an app. for prepg. such liposomes and methods for employing such liposomes in drug delivery applications are also disclosed.

L141 ANSWER 4 OF 36 MEDLINE
AN 95185113 MEDLINE
TI Protective immunity by intramuscular injection of low doses of **influenza** virus **DNA vaccines**.
AU Ulmer J B; Deck R R; DeWitt C M; Friedman A; Donnelly J J; Liu M A
CS Department of Virus and Cell Biology, Merck Research Laboratories, West Point, PA 19486.
SO Vaccine, (1994 Dec) 12 (16) 1541-4.
Journal code: X6O. ISSN: 0264-410X.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9506
AB Dose-response relationships were investigated between dose of **influenza** virus haemagglutinin (HA) or nucleoprotein (NP) **DNA vaccines**, and immunogenicity and protective efficacy based on humoral and cellular immunity. In mice, intramuscular (i.m.) injection of HA or NP DNA, at doses of 100 ng to 1 microgram, was found to generate haemagglutination inhibiting (HI) antibodies and cytotoxic T-lymphocytes, respectively, and provide protection in **influenza** virus challenge models. A direct correlation between the amount of DNA injected and the level of HI antibody was observed. In non-human primates, high-titre neutralizing antibodies were induced in animals vaccinated with as little as 10 micrograms of HA DNA. These results indicate that low doses of DNA administered by i.m. injection provide protective efficacy against **influenza**.

L141 ANSWER 5 OF 36 MEDLINE DUPLICATE 1
AN 95194703 MEDLINE
TI A qualitative progression in **HIV** type 1 glycoprotein 120-specific cytotoxic cellular and humoral immune responses in mice receiving a **DNA**-based glycoprotein 120 **vaccine**.

AU Fuller D H; Haynes J R
CS Agracetus, Inc., Middleton, Wisconsin 53562.
SO AIDS Res Hum Retroviruses, (1994 Nov) 10 (11) 1433-41.
Journal code: ART. ISSN: 0889-2229.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9506
AB The potential for eliciting humoral and cytotoxic T lymphocyte (CTL) responses to **HIV-1** gp120 by **gene gun** -based DNA immunization in mice was examined. We speculated that the induction of de novo antigen production in the epidermis of BALB/c mice following particle bombardment-based gene delivery would result in both MHC class I- and class II-mediated antigen presentation for the elicitation of CTL and antibody responses, respectively. Following epidermal delivery of microgram quantities of an expression plasmid, gp120 production resulted in the appearance of MHC class I-restricted, CD8+ CTL responses. gp120-specific CTL responses peaked following a booster immunization, then declined with the appearance of gp120-specific IgG responses when additional booster immunizations were administered. This qualitative progression in the nature of gp120-specific immune responses with subsequent immunizations was paralleled by a simultaneous shift in the interferon-gamma and interleukin 4 release profiles following antigen stimulation of splenocytes in vitro. The simultaneous shifts in immune responses and cytokine release profiles indicate that the progression of antigen-specific CTL and IgG responses in gp120 DNA-immunized mice may be mediated through changes in the in vivo production of cytokines, such as those associated with the Th1 and Th2 subsets of CD4+ cells.

L141 ANSWER 6 OF 36 CAPLUS COPYRIGHT 1995 ACS
AN 1994:678391 CAPLUS
DN 121:278391
TI Construction and evaluation of an expression vector allowing the stable expression of foreign antigens in a Salmonella typhimurium vaccine strain
AU Tijhaar, Edwin J.; Zheng-Xin, Yan; Karlas, Jos A.; Meyer, Thomas F.; Stukart, Marij J.; Osterhaus, Albert D. M. E.; Mooi, Frits R.
CS Laboratory Immunobiology, National Institute Public Health and Environmental Protection, Bilthoven, 3720 BA, Neth.
SO Vaccine (1994), 12(11), 1004-11
CODEN: VACCDE; ISSN: 0264-410X
DT Journal
LA English
AB Salmonella strains have great potential as live carriers of heterologous antigens to induce immunity against a variety of infectious diseases. However, the amt. of heterologous antigen required to induce an adequate immune response may be toxic for the bacterium and result in cell death, over-attenuation or loss of expression of the heterologous antigen. To solve this problem an expression vector was developed with a strong **promoter** located on a DNA fragment which is inverted at random. Antigen is only expressed in one particular orientation of the **promoter** . Thus a bacterial population harboring the plasmid will consist of a subpopulation which does not produce heterologous antigen, and is

therefore not affected in growth, persistence and dissemination within the host. Further, this non-producing population will continuously segregate antigen-producing bacteria. To evaluate the system, cholera toxin B subunit (CtxB) was used as a model antigen. Anal. of the plasmid **DNA** isolated from Salmonella revealed a selection against the **promoter** orientation that directs **transcription** of the CtxB gene. In spite of this, the vector was stably maintained in vivo and induced CtxB-specific IgA and IgG in mice. These results indicate that this kind of expression vector may offer a soln. to the problem of unstable expression of foreign antigens in live bacterial vaccine strains.

L141 ANSWER 7 OF 36 BIOSIS COPYRIGHT 1995 BIOSIS
AN 94:508603 BIOSIS
DN 97521603
TI Mucosal immunity to infection with implications for vaccine development.
AU Staats H F; Jackson R J; Marinaro M; Takahashi I; Kiyono H; McGhee J R
CS Box 3307, Duke University Med. Cent., Durham, NC 27710, USA
SO Current Opinion in Immunology 6 (4). 1994. 572-583. ISSN: 0952-7915
LA English

L141 ANSWER 8 OF 36 CAPLUS COPYRIGHT 1995 ACS
AN 1995:193653 CAPLUS
DN 122:298782
TI Identification of some of the physicochemical characteristics of **microspheres** which influence the induction of the immune response following **mucosal delivery**
AU Alpar, Hazire Oya; Almeida, Antonio Jose
CS Pharm. Sci. Inst., Aston Univ., Birmingham, B4 7ET, UK
SO Eur. J. Pharm. Biopharm. (1994), 101(4), 198-202
CODEN: EJPBEL; ISSN: 0340-8159
DT Journal
LA English
AB Poly(L-lactide) (PLA) **microspheres** have proven adjuvanticity and are used in antigen delivery. The changes in surface hydrophobicity and .zeta. potential of PLA **microspheres** following adsorption or encapsulation of model protein antigens were studied by hydrophobic interaction chromatog. and .zeta. potential anal. Protein adsorption followed the classical Langmuirian model and is probably influenced by polar interactions. Protein adsorption elevated surface hydrophobicity of particles, the degree depending on the protein employed. Adsorption of bovine serum albumin influences the increase more than .gamma.-globulin and tetanus toxoid (TT). Uncoated and protein-coated PLA **microspheres** are far less hydrophobic than those of latex controls. Hydrophobicity was also influenced by the surfactant employed in the **microspheres'** manuf. i.e. polyvinyl alc. and Tween 80. The strongly hydrophobic TT prepns. were more active in promoting a strong and lasting immune response compared to those of lower hydrophobicity. It is suggested that hydrophobicity is important for design of vaccine carriers targeted to immunocompetent cells.

L141 ANSWER 9 OF 36 BIOSIS COPYRIGHT 1995 BIOSIS
AN 94:359200 BIOSIS

DN 97372200
TI Gene inoculation generates immune response against **human immunodeficiency** virus type 1.
AU Siegel F
CS Paul-Ehrlich-Inst., Paul-Ehrlich-Str. 51-59, 63225 Langen, GER
SO AIDS-Forschung 9 (4). 1994. 195-196. ISSN: 0179-3098
LA German

L141 ANSWER 10 OF 36 CAPLUS COPYRIGHT 1995 ACS
AN 1994:417837 CAPLUS
DN 121:17837
TI Gelatin **microspheres** as a new approach for the controlled **delivery** of synthetic oligonucleotides and PCR-generated **DNA** fragments
AU Cortesi, Rita; Esposito, Elisabetta; Menegatti, Enea; Gambari, Roberto; Nastruzzi, Claudio
CS Dep. Pharm. Sci., Ferrara Univ., Ferrara, I-44100, Italy
SO Int. J. Pharm. (1994), 105(2), 181-6
CODEN: IJPHDE; ISSN: 0378-5173
DT Journal
LA English
AB The present paper reports the prepn. and characterization of gelatin microspheres contg. (a) a 44-mer single-stranded synthetic oligonucleotide, complementary to the HLA-DRA gene (ssDNA-44) and (b) a double-stranded fragment, 144 bp in length, prepd. by the polymerase chain reaction (PCR) mimicking a region of the HIV-1 LTR (dsDNA-144). Spherical gelatin microspheres were obtained by a coacervation method, showing a high percentage of encapsulation yields (over 85%). Size distribution anal. of the microspheres produced resulted in an av. diam. of 22 .mu.m. In order to analyze the release profiles of both ssDNA-44 and dsDNA-144 from microspheres, in vitro studies were carried out by using a flow-through cell method. The chem. stability of dsDNA-144 to the encapsulation procedure steps was in addn. demonstrated by PCR amplification of the DNA eluted from the gelatin microspheres. The reported results indicate that gelatin-based microspheres offer excellent potential as carrier systems for the in vivo administration of both single- and double-stranded DNA mols.

L141 ANSWER 11 OF 36 BIOSIS COPYRIGHT 1995 BIOSIS
AN 94:314518 BIOSIS
DN 97327518
TI Cloning and expression of the gene encoding CS3 fimbriae antigen of enterotoxigenic Escherichia coli.
AU Dong Z-Z; Zhang Z-S; Li S-Q; et al
CS Inst. Biotechnology, Academy Military Med. Sciences, Beijing 100850, CHN
SO Zhonghua Weishengquxue He Mianyixue Zazhi 14 (2). 1994. 84-88. ISSN: 0254-5101
LA Chinese
AB The results of Southern blot revealed that the CS3 antigen was coded by a large plasmid (60MD) isolated from E44815 strain, and the DNA fragment containing the gene encoding CS3 fimbriae was about 5.0 kb when the plasmid was digested by Hind III. Limited gene bank was constructed by recovering all the DNA fragments of about 5.0 kb after the plasmid was digested and inserting it into the Hind III site of pBR322. Through screening, we obtained two kinds of positive

recombinant plasmids harboring the cloned fragment in opposite orientation. Whole cell ELISA demonstrated that only when the orientation of **transcription** of the cloned fragment was identical with that of P1 **promoter** in the pBR322, could the CS3 antigen be expressed. And the test also demonstrated that the level of expression of CS3 antigen were different due to different on hosts. SDS-PAGE assay and Western blot identified that CS3 antigen had two different forms and the molecular weight were 15kD and 15.5 kD, respectively. Cloning of the gene encoding CS3 antigen permits us to study the regulation of its expression and to construct vaccine against ETEC.

L141 ANSWER 12 OF 36 CAPLUS COPYRIGHT 1995 ACS
AN 1994:653235 CAPLUS
DN 121:253235
TI Polynucleotide vaccination against influenza *
AU Donnelly, John J.; Friedman, Arthur; Montgomery, Donna; Shiver, John W.; Leander, Karen R.; Perry, Helen; Martinez, Douglas; Ulmer, Jeffrey B.; Liu, Margaret A.
CS Dep. Virus Cell Biol., Merck Res. Lab., West Point, PA, 19486, USA
SO Vaccines 94: Mod. Approaches New Vaccines Incl. Prev. AIDS, [Annu. Meet.], 11th (1994), Meeting Date 1993, 55-9. Editor(s): Norrby, Erling. Publisher: Cold Spring Harbor Lab. Press, Cold Spring Harboy, N.Y.
CODEN: 60PMAJ
DT Conference
LA English
AB The authors discuss the possibility of i.m. injection of DNA as a means of immunizing humans against influenza A.

L141 ANSWER 13 OF 36 MEDLINE
AN 93206107 MEDLINE
TI Naked **DNA** points way to **vaccines** [news; comment].
CM Comment on: Science 1993 Mar 19;259(5102):1745-9
AU Cohen J
SO Science, (1993 Mar 19) 259 (5102) 1691-2.
Journal code: UJ7. ISSN: 0036-8075.
CY United States
DT Commentary
News Announcement
LA English
FS Priority Journals; Cancer Journals
EM 9306

L141 ANSWER 14 OF 36 CAPLUS COPYRIGHT 1995 ACS
AN 1994:38114 CAPLUS
DN 120:38114
TI Tetanus/whooping cough Vaccine compositions for **mucosal delivery**
IN Roberts, Mark; Dougan, Gordon
PA Medeva Holdings BV, Neth.
SO PCT Int. Appl., 33 pp.
CODEN: PIXXD2
PI WO 9321950 A1 931111
DS W: AT, AU, BB, BG, BR, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK,

UA, US
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG
AI WO 93-GB880 930428
PRAI GB 92-9118 920428
DT Patent
LA English
AB The invention provides the use of an antigen which is a mucosally immunogenically active substance comprising the 50kD C fragment of tetanus toxin, an immunogenic fragment thereof, or a deriv. thereof formed by amino acid deletion, substitution or insertion for the manuf. of a vaccine compn. for administration to a **mucosal** surface to induce an immune response in the **mucosal** surface against tetanus infection. The vaccine compn. preferably contains the P.69 outer membrane protein of B.pertussis, and B.pertussis filamentous hemagglutinin. The invention also provides vaccine compns. per se and a method of treating tetanus and optionally whooping cough using the vaccine compns. Protection of mice immunized intranasally with C fragment and then challenged with tetanus toxin is reported. Protection was greatly enhanced by giving 2 doses of C fragment.

L141 ANSWER 15 OF 36 CAPLUS COPYRIGHT 1995 ACS
AN 1993:624261 CAPLUS
DN 119:224261
TI Immunization by inoculation of DNA transcription unit
IN Robinson, Harriet L.; Fynan, Ellen F.; Webster, Robert G.
PA University of Massachusetts Medical Center, USA
SO PCT Int. Appl., 41 pp.
CODEN: PIXXD2
PI WO 9319183 A1 930930
DS W: CA, JP
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
AI WO 93-US2394 930317
PRAI US 92-855562 920323
US 93-9833 930127
DT Patent
LA English
AB A method is disclosed for immunizing a vertebrate which comprises introducing into the vertebrate a DNA transcription unit contg. DNA encoding desired antigen(s). The uptake of the DNA transcription unit by a host vertebrate results in the expression of the desired antigen(s), thereby eliciting humoral or cell-mediated immune responses or both. The elicited immune response can provide protection against infection by pathogenic agents, provide an anti-tumor response, or provide contraception. The host can be any vertebrate, avian or mammal, including humans. Chickens immunized with transcription unit pP1/H7 (encoding a replication-competent avian leukosis virus expressing the influenza virus hemagglutinin type 7 gene) were protected against a lethal influenza virus challenge. The effect of different routes of inoculation was examd. Immunization of chickens and mice using a nonretroviral transcription unit is also described.

L141 ANSWER 16 OF 36 CAPLUS COPYRIGHT 1995 ACS
AN 1993:464938 CAPLUS
DN 119:64938

TI Myogenic vector systems and their use in gene therapy
IN Schwartz, Robert J.; Demayo, Franco J.; O'Malley, Bert W.
PA Baylor College of Medicine, USA
SO PCT Int. Appl., 56 pp.
CODEN: PIXXD2
PI WO 9309236 A1 930513
DS W: AU, BG, CA, CS, FI, HU, JP, NO, PL, RO, RU, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE
AI WO 92-US9353 921103
PRAI US 91-789919 911106
DT Patent
LA English
AB Expression vectors specific for myogenic cells are provided for gene therapy. The expression cassette of such a vector uses a myogenesis-related **promoter** (e.g. a skeletal .alpha.-actin gene **promoter**), a myogenic specific 3'-untranslated region (3'UTR), and a non-coding region (NCR) contiguous to the 3'UTR contg. a transcription termination signal. The utility of the vector can be further increased by adding a leader sequence, an intron sequence, initiation codon, and cleavage sites for specific restriction endonucleases. To facilitate uptake and myogenic expression, the vector can be coated with histones and a **DNA** initiation complex composed of a serum response factor, a **transcription** initiation factor, and a trans-acting regulatory factor attached to the **promoter** by interaction with the serum response element and TATA box. The vector has a variety of applications, e.g., in gene replacement, in vaccines, and treatment of diseases including muscle atrophy. Expression of human insulin-like growth factor (IGF-1) using the chicken skeletal .alpha.-actin gene **promoter** in myoblasts and transgenic mice was demonstrated and their use in treatment of muscle atrophies described.

L141 ANSWER 17 OF 36 BIOSIS COPYRIGHT 1995 BIOSIS
AN 94:61784 BIOSIS
DN 97074784
TI Heterologous and homologous protection against **influenza** A by DNA vaccination: Optimization of DNA vectors.
AU Montgomery D L; Shiver J W; Leander K R; Perry H C; Friedman A; Martinez D; Ulmer J B; Donnelly J J; Liu M A
CS Dep. Virus and Cell Biol., SumneytownPike WP16-101, Merck Res. Lab., West Point, PA 19486, USA
SO DNA and Cell Biology 12 (9). 1993. 777-783. ISSN: 1044-5498
LA English
AB We have recently shown that direct injection of **DNA** can be an effective **vaccine** strategy eliciting both humoral and cell-mediated immune responses. Vectors were designed specifically for vaccination by direct DNA injection and refined to improve plasmid production in Escherichia coli. The vectors consist of a pUC-19 backbone with the cytomegalovirus (CMV) IE1 enhancer, **promoter**, and intron A **transcription** regulatory elements and the BGH polyadenylation sequences driving the expression of the reporter gene CAT or **influenza** A nucleoprotein (NP) or hemagglutinin (HA). The respective vectors expressed high levels of chloramphenicol acetyltransferase (CAT) and NP in tissue culture, and yielded 14-15 mg of purified plasmid per liter of Escherichia coli culture. Immunization of mice with the NP and HA expression

vectors resulted in protection from subsequent lethal challenges of **influenza** using either heterologous or homologous strains, respectively.

L141 ANSWER 18 OF 36 MEDLINE
AN 94214975 MEDLINE
TI Naked **DNA** and **vaccine** design.
AU Braciale T J
CS Beirne Carter Center for Immunology Research, University of Virginia Health Sciences Center, Charlottesville 22908.
SO Trends Microbiol, (1993 Dec) 1 (9) 323-4; discussion 324-5.
Journal code: B1N. ISSN: 0966-842X.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9407

L141 ANSWER 19 OF 36 MEDLINE
AN 93150673 MEDLINE
TI Host range selection of vaccinia recombinants containing insertions of foreign genes into non-coding sequences.
AU Smith K A; Stallard V; Roos J M; Hart C; Cormier N; Cohen L K; Roberts B E; Payne L G
CS Applied bioTechnology, Inc., Cambridge, MA 02142.
NC 2 R44 A1 26028 0255
SO Vaccine, (1993) 11 (1) 43-53.
Journal code: X6O. ISSN: 0264-410X.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9305
AB A simple yet powerful selection system was developed for the insertion of foreign genes in vaccinia virus. The selection system utilizes the vaccinia virus K1L (29K) host range gene which is located in HindIII M. This gene is necessary for growth in RK-13 cells but not in BSC40 or CV-1 cells. A vaccinia mutant (vAbT33) unable to grow on RK-13 cells was constructed having sequences at the 3' end of the K1L gene and the adjacent M2L gene deleted and replaced with the beta-galactosidase gene regulated by the BamHI F (F7L) **promoter**. A recombination plasmid containing the hepatitis B surface (HBs) antigen gene regulated by the M2L **promoter** and the complete sequence of the K1L gene was used to insert the HBs gene into vAbT33. The M2L negative K1L positive recombinant was easily isolated in two rounds of plaque purification by plating the virus on RK-13 cell monolayers. The K1L gene selection system allows the isolation of recombinants arising at frequencies as low as 1/100,000. It was noted that recombinants containing vaccinia sequence duplications (promoters) resulted in intragenomic recombinations that eliminated all sequences between the duplications. A second recombination plasmid was constructed that allowed insertion into the vaccinia genome without the loss of vaccinia coding sequences. This was achieved by insertion of the pseudorabies virus GIII gene regulated by the vaccinia H5R (40K) **promoter** between the translation and **transcription** stop signals at the 3' end of the K1L gene. The K1L gene

transcription stop signal thus became the stop signal for the inserted GIII gene and an upstream **transcription** stop signal present in the H5R **promoter** fragment provided the stop signal for the K1L gene. This manipulation of the vaccinia genome had no effect on the accumulation or 5' end of the M2L gene transcripts. Although the insertion lengthened the 3' end and lowered the accumulation of K1L transcripts it altered neither the virulence nor the immunogenicity of the recombinant.

L141 ANSWER 20 OF 36 CAPLUS COPYRIGHT 1995 ACS
AN 1993:109702 CAPLUS
DN 118:109702
TI Oral delivery systems for microparticles
IN Russell-Jones, Gregory John; Westwood, Steven William
PA Biotech Australia Pty. Ltd., Australia
SO PCT Int. Appl., 35 pp.
CODEN: PIXXD2
PI WO 9217167 A1 921015
DS W: AU, CA, JP, KR, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE
AI WO 92-AU141 920402
PRAI AU 91-5385 910402
DT Patent
LA English
AB Oral delivery systems (e.g., microspheres, microparticles) are described for the delivery of drugs to lymphatic system via the mucosal epithelium of the host. Suitable compds. can be mucosal binding proteins, viral and bacterial, adhesions, lectins, vitamin B12 and analogs which are encapsulated within microparticles. Thus, a diaminoethane deriv. of vitamin B12 was prepd. and the deriv. was coupled to protein microspheres. The microspheres can be administered orally by feeding in a soln. of 0.1 m carbonate buffer (pH 9.5).

L141 ANSWER 21 OF 36 CAPLUS COPYRIGHT 1995 ACS
AN 1992:212757 CAPLUS
DN 116:212757
TI Inactivated whole-virus vaccine derived from a proviral DNA clone of simian immunodeficiency virus induces high levels of neutralizing antibodies and confers protection against heterologous challenge
AU Johnson, Philip R.; Montefiori, David C.; Goldstein, Simoy; Hamm, Tiffany E.; Zhou, Jiying; Kitov, Svetlana; Haigwood, Nancy L.; Misher, Lynda; London, William T.; et al.
CS Dep. Microbiol., Georgetown Univ., Rockville, MD, 20852, USA
SO Proc. Natl. Acad. Sci. U. S. A. (1992), 89(6), 2175-9
CODEN: PNASA6; ISSN: 0027-8424
DT Journal
LA English
AB The ability was tested of macaques vaccinated with inactivated whole simian immunodeficiency virus (SIV) to resist challenge with either homologous or heterologous cell-free uncloned SIV administered by the i.v. route. The vaccine virus was derived from a proviral DNA clone and thus was considered genetically homogeneous. Macaques received either hepatitis B surface antigen or the inactivated whole-SIV vaccine at wk 0, 4, and 49 of the study. All SIV vaccine recipients developed high levels of homologous and heterologous neutralizing antibodies in response to vaccination. At the time of

challenge (wk 53), vaccinees were further stratified to receive either homologous or heterologous uncloned live SIV. The envelope glycoproteins of the homologous and heterologous challenge viruses were 94% and 81% identical to the vaccine virus, resp. Regardless of challenge inoculum, all vaccinees in the control group (hepatitis B surface antigen) became infected, whereas all SIV vaccinees were protected against detectable infection. Thus, an efficacious vaccine for HIV might be possible and genetic variation of HIV might not be an unsurmountable obstacle for vaccine development.

L141 ANSWER 22 OF 36 CAPLUS COPYRIGHT 1995 ACS
AN 1992:658071 CAPLUS
DN 117:258071
TI Fundamental studies on development of a new drug delivery system employing magnetic microspheres with different surface properties
AU Yanase, Noriko; Asakura, Hideki; Suzuta, Tatsuo
CS Dep. Immunol. Serol., Tokyo Med. Coll., Tokyo, Japan
SO Tokyo Ika Daigaku Zasshi (1992), 50(4), 537-44
CODEN: TIDZAH; ISSN: 0040-8905
DT Journal
LA Japanese
AB In order to improve the drug **delivery** system for treatment of cancer, the authors synthesized 3 kinds of magnetic **microspheres** which had similar size and iron content but different surface characters, and investigated the best condition for adsorption of the anticancer drug daunomycin (DM), tumor antibody and **DNA** onto the magnetic **microspheres**. The quantity of IgG or DNA adsorbed was dependent on the character of **microsphere** surface. **Microspheres** with functional groups such as carboxyl and hydroxyl groups on their surface adsorbed DM directly more than 200 .mu.g of DM per mg **microspheres**, while those particles without the functional groups adsorbed only less than 2 .mu.g of DM per mg **microspheres**. The best condition for DM adsorption onto the **microspheres** with NH2 groups was the indirect method via DNA (spacer). Based on these studies, the authors investigated the effectiveness of the targeting therapy in vitro and in vivo. In in vitro test, the latex-bound DM inhibited growth of the MH134 cells more significantly than the free DM on the equal doses. The 50% inhibitory doses (ID50) of the latex-bound DM was 1.1 .mu.g/mL, whereas that of the free DM was 1.8 .mu.g/mL. DM adsorbed indirectly onto the **microspheres** with NH2 groups were proved to be more efficient to the tumor cells than the drug adsorbed directly. The survival periods of C3H mice inoculated with MH134 cells without any treatment or treated with the **microspheres** bound DNA (control group) were 21.0 .+-. 10.1 days and 29.3 .+-. 7.9 days, resp., while those for treated mice with the free DM and the bound DM (4 mg/kg) were 35.0 .+-. 7.7 and 48.9 .+-. 28.2 days, resp. It showed significant effectiveness for the latex-bound DM to treat the tumors ($P < 0.01$).

L141 ANSWER 23 OF 36 CAPLUS COPYRIGHT 1995 ACS
AN 1993:52048 CAPLUS
DN 118:52048
TI Selection of a muramyl peptide based on its lack of activation of nuclear factor-.kappa.B as a potential adjuvant for AIDS vaccines
AU Schreck, R.; Bevec, D.; Dukor, P.; Baeuerle, P. A.; Chedid, L.;

Bahr, G. M.
CS Lab. Mol. Biol., Ludwig-Maximilians-Univ., Martinsried, Germany
SO Clin. Exp. Immunol. (1992), 90(2), 188-93
CODEN: CEXIAL; ISSN: 0009-9104
DT Journal
LA English
AB Activation of the cellular transcription factor nuclear factor-.kappa.B (NF-.kappa.B) by cytokines and other immunostimulants has been tightly linked with enhanced replication of human immunodeficiency virus-type 1 (HIV-1) in infected cells. Various immunomodulators are currently being examd. in animal and human trials for their suitability as adjuvants in potential vaccines against AIDS. It may prove to be beneficial to select adjuvants that do not induce NF-.kappa.B activation and particularly if the vaccines are to be aimed at seropos. individuals. The authors have examd. a battery of synthetic immunostimulants of the muramyl peptide family for their ability to activate NF-.kappa.B in different cell lines and by different muramyl peptides possessing immunostimulatory activities. The mechanism of such activation is apparently via prodn. of reactive O intermediates (ROI) since pretreatment of cells with antioxidants blocked subsequent activation of NF-.kappa.B. However, among all the mols. tested only 1 lipophilic, nonpyrogenic adjuvant active muramyl peptide showed a complete lack of NF-.kappa.B activation in all cell lines tested. This mol. could well become the adjuvant of choice in future AIDS vaccines.

L141 ANSWER 24 OF 36 CAPLUS COPYRIGHT 1995 ACS
AN 1993:447063 CAPLUS
DN 119:47063
TI Helper-independent live recombinant adenovirus vector expressing the hemagglutinin-esterase membrane glycoprotein
AU Yoo, Dongwan; Yoo, Ick Dong; Yoon, Young Ho; Graham, Frank L.; Babiuk, Lorne A.
CS Vet. Infect. Dis. Organ., Univ. Saskatchewan, Saskatoon, SK, S7N 0W0, Can.
SO J. Microbiol. Biotechnol. (1992), 2(3), 174-82
CODEN: JOMBES
DT Journal
LA English
AB The hemagglutinin-esterase glycoprotein (HE) gene of bovine coronavirus, coupled with a simian virus 40 early **promoter** and polyadenylation signal, was inserted into a human adenovirus transfer vector. The transfer vector was used to co-transfect 293 cells along with adenovirus genomic DNA. The hemagglutinin-esterase **transcription** unit was rescued into the adenovirus genome by homologous in vivo **DNA** recombination between the vector plasmid **DNA** and the adenovirus genomic **DNA**, and a recombinant adenovirus was isolated by several rounds of plaque assays. Thus, the recombinant adenovirus carries the hemagglutinin-esterase gene in the early transcription region 2 (E3) of the adenovirus genome in the parallel orientation to the E3 transcription. The recombinant adenovirus synthesized the HE polypeptide in HeLa cells, as demonstrated by immunopptn. with anti-coronavirus rabbit antisera. The recombinant HE polypeptide could be labeled by [3H]glucosamine, demonstrating that the recombinant HE was glycosylated. Cells expressing the HE

polypeptide exhibited hemadsorption activity when incubated with mouse erythrocytes. The HE was transported to the plasma membrane, as shown by the cell surface immunofluorescence, indicating that the recombinant HE polypeptide retained its biol. activities. Potential for the use of infectious recombinant adenovirus as a live virus-vectored vaccine candidate for bovine coronavirus disease is discussed.

L141 ANSWER 25 OF 36 CAPLUS COPYRIGHT 1995 ACS
AN 1990:401244 CAPLUS
DN 113:1244
TI Removal of cryptic poxvirus transcription termination signals from the human immunodeficiency virus type 1 envelope gene enhances expression and immunogenicity of a recombinant vaccinia virus
AU Earl, Patricia L.; Hugin, Ambros W.; Moss, Bernard
CS Lab. Viral Dis., Natl. Inst. Allergy Infect. Dis., Bethesda, MD, 20892, USA
SO J. Virol. (1990), 64(5), 2448-51
CODEN: JOVIAM; ISSN: 0022-538X
DT Journal
LA English
AB The in vivo role of the proposed poxvirus early transcription termination signal TTTTTNT was confirmed by anal. of the RNA species made by recombinant vaccinia viruses. Premature transcription termination occurred following each of 2 TTTTTNT sequences present naturally within the coding region of the human immunodeficiency virus type 1 envelope gene. Alteration of the TTTTTNT sequences, without changing the encoded amino acids, resulted in prodn. of full-length early mRNAs, improved protein expression, and a more consistent immune response.

L141 ANSWER 26 OF 36 CAPLUS COPYRIGHT 1995 ACS
AN 1990:11913 CAPLUS
DN 112:11913
TI A bioactive peptide **microspheres** for **mucosal delivery**
IN Illum, Lisbeth
PA Cosmas-Damian Ltd., UK
SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2
PI WO 8903207 A1 890420
DS W: AU, CH, DK, FI, GB, JP, NO, US
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE
AI WO 88-GB836 881010
PRAI GB 87-23846 871010
DT Patent
LA English
AB Drug delivery compns. suitable for delivery across **mucosal** surfaces such as the vagina, eye or nose comprise a plurality of **microspheres** with the drug assocd. with each **microsphere**, the drug being for systemic delivery and having a max. mol. wt. of 6000, and the compn. being free of an enhancer. The **microspheres** may be of dextran, starch, gelatin or albumin. The drugs include peptides such as insulin and antigens. In sheep, administration of insulin in combination with starch **microspheres** gave a 180% increase in AUC of plasma insulin as compared to a simple nasal insulin soln. At the same time the

peak insulin level was increased by 350%.

L141 ANSWER 27 OF 36 MEDLINE
AN 89068838 MEDLINE
TI The gene encoding the gIII envelope protein of pseudorabies virus vaccine strain Bartha contains a mutation affecting protein localization.
AU Robbins A K; Ryan J P; Whealy M E; Enquist L W
CS Central Research & Development Department, E. I. du Pont de Nemours & Co., Inc., Wilmington, Delaware 19898.
SO J Virol, (1989 Jan) 63 (1) 250-8.
Journal code: KCV. ISSN: 0022-538X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 8903
AB Pseudorabies virus (PRV) vaccine strain Bartha has a diminished capacity to cause disease and harbors a variety of mutations affecting virulence. It has been reported that PRV Bartha produces virions with reduced amounts of the major envelope glycoprotein gIII. One hypothesis was that this phenotype was due to reduced expression of the gIII gene. In this report, we demonstrate that the reduced amount of gIII in virions was not mediated at the level of **transcription**, but rather reflected a defect in protein localization. We describe experiments with gene replacement technology to prove that the expression defect was closely linked to the gIII gene itself. Using pulse-chase experiments, we found a defect similar to that observed for certain signal sequence mutations of PRV Becker gIII. The Bartha gIII protein was translated, but was inefficiently introduced into the membrane protein export pathway. Consequently, only a fraction of the primary Bartha gIII translation product was glycosylated and matured. The remaining fraction stayed presumably in the cytoplasm, where it never became glycosylated or inserted into cell or virus membranes. The result was that Bartha-infected cells produced virions with reduced amounts of gIII in their envelopes. Comparison of the DNA sequence of the **promoter** and amino-terminal coding regions of Becker and Bartha gIII genes revealed a single base pair difference in Bartha, changing codon 14 of the signal sequence from a leucine (CTC) to a proline (CCC) codon. We suggest that the signal sequence mutation is responsible for the apparent reduced expression phenotype of this attenuated strain. This mutation represents, to our knowledge, the first reported natural signal sequence mutation in a herpesvirus glycoprotein.

L141 ANSWER 28 OF 36 CAPLUS COPYRIGHT 1995 ACS
AN 1989:2173 CAPLUS
DN 110:2173
TI Expression vectors for heterologous protein manufacture in mammalian cells
IN Asselbergs, Fredericus A. M.; Alaimo, Danielle
PA Ciba-Geigy A.-G., Switz.
SO Eur. Pat. Appl., 74 pp.
CODEN: EPXXDW
PI EP 271003 A2 880615
DS R: BE, CH, DE, ES, FP, GB, GR, IT, LI, LU, NL, SE

AI EP 87-117891 871203
PRAI GB 86-29153 861205
DT Patent
LA English
AB Novel plasmids for use in mammalian cells comprise specific arrangements of **transcription** signals controlling both the expression of **DNA** encoding a heterologous protein and a selection gene such that a high proportion of transfected cells stably express the heterologous gene when the plasmid is applied to the cells as circular **DNA**. Plasmid pCGA48 was constructed. It contained, in order: mouse cytomealovirus enhances and **promoter**, tissue-type plasminogen activator cDNA dn .beta.-globin polyadenylation site, genes for dehydrofolate reductase, for tetracycline and ampicillin resistance, and for neomycin resistance (the latter in an SV40 expression cassette). DHFR- CHO cells were transfected with this plasmid. More than 95% of the resulting DHFR+ CHO cells also produced tissue-type plasminogen activator (av. prodn. 22 pg/cell/24 h). These cells still produced the activator after about 50 generations of cell growth.

L141 ANSWER 29 OF 36 BIOSIS COPYRIGHT 1995 BIOSIS
AN 88:295712 BIOSIS
DN BR35:12536
TI VACCINE FOR VESICULAR STOMATITIS VIRUS.
AU ROSE J K; MOSS B; YILMA T; MACKETT M
CS SOLANA BEACH, CALIF., USA.
ASSIGNEE: THE SALK INSTITUTE FOR BIOLOGICAL STUDIES
PI US 4738846 19 Apr 1988
SO OFF GAZ U S PAT TRADEMARK OFF PAT 1089 (3). 1988. 1397. CODEN: OGUPE7 ISSN: 0098-1133
DT Patent
LA English

L141 ANSWER 30 OF 36 MEDLINE
AN 88299953 MEDLINE
TI Dengue 2 virus envelope protein expressed by a recombinant vaccinia virus fails to protect monkeys against dengue.
AU Deubel V; Kinney R M; Esposito J J; Cropp C B; Vorndam A V; Monath T P; Trent D W
CS Division of Vector-Borne Viral Diseases, Centers for Disease Control, Fort Collins, Colorado 80522.
NC 1F05 TWO 3596
SO J Gen Virol, (1988 Aug) 69 (Pt 8) 1921-9.
Journal code: I9B. ISSN: 0022-1317.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 8811
AB A cDNA copy of the dengue (DEN) 2 virus genome region encoding the virion capsid, membrane and envelope structural proteins has been inserted into vaccinia virus (VV) DNA under the control of its 11K late **promoter**. The DEN-2 envelope protein was expressed and processed in cells infected with the VV recombinant (VV/D2S). No DEN-2 virus antibody response was detected in mice, hamsters or monkeys vaccinated with VV/D2S. Furthermore, a viraemia was observed

in recombinant-vaccinated monkeys after challenge with infectious DEN-2 virus.

L141 ANSWER 31 OF 36 BIOSIS COPYRIGHT 1995 BIOSIS
AN 87:420064 BIOSIS
DN BA84:86726
TI EXPRESSION OF HEPATITIS B VIRUS SURFACE ANTIGEN GENE IN YEAST USING GAL-1-ADCI GAL-10 AND ADCI PROMOTERS.
AU SONG K-B; KIM K-T; KIM J; RHEE S-K; HAN M-H
CS GENET. ENG. CENT., KAIST, P.O. BOX 131, CHEONGRYANG, SEOUL, KOREA.
SO KOREAN BIOCHEM J 20 (2). 1987. 163-170. CODEN: KBCJAK ISSN: 0368-4881
LA English
AB We have constructed plasmids in which **transcription** of the gene encoding human hepatitis B virus surface antigen(HBsAg) is under the control of GAL10, ADCI or a double **promoter** consisting of GAL1 and ADCI. Construction of the double **promoter** was achieved by insertion of a 650 bp fragment of divergent GAL1-GAL10 **promoter** DNA in the upstream of ADCI **promoter**. By radioimmunoassay, it was shown that three recombinant plasmids were all capable of producing HBsAg in the host Saccharomyces cerevisiae strains. When induced by galactose, cells synthesized 3-5 fold more HBsAg under GAL **promoter** control than under ADCI **promoter** control in an identical plasmid. Production of HBsAg in a system utilizing the double **promoter** was not increased additively, although it appeared to retain galactose inducibility. Northern blot analysis indicated that induction of the upstream GAL1 **promoter** caused inhibition of **transcription** initiation at the downstream ADCI **promoter**.

L141 ANSWER 32 OF 36 BIOSIS COPYRIGHT 1995 BIOSIS
AN 87:399789 BIOSIS
DN BA84:75969
TI EXPRESSION OF A MAJOR BOVINE **ROTAVIRUS** NEUTRALIZATION ANTIGEN VP7C IN ESCHERICHIA-COLI.
AU MCCRAE M A; MCCORQUODALE J G
CS DEPT. OF BIOL. SCI., UNIV. OF WARWICK, COVENTRY CV4 7AL, UK.
SO GENE (AMST) 55 (1). 1987. 9-18. CODEN: GENED6 ISSN: 0378-1119
LA English
AB Sequences from genomic RNA segment 8 of the United Kingdom tissue-culture (t.c.)-adapted bovine **rotavirus** encoding a major viral neutralisation antigen VP7c have been expressed in Escherichia coil. Expression under the regulated control of the bacteriophage .lambda.pR **promoter** was as a C-terminal extension of E. coli .beta.-galactosidase (.beta.Gal). Following temperature induction, high levels of the fusion protein were synthesised and accumulated in induced cells, making up 5%-15% of total bacterial cell protein after 2 h of induction. Immunisation of sero-negative rabbits and mice with gel-purified fusion-protein raised antibodies, which gave specific immunofluorescence with virus-infected cells and were able to immunoprecipitate proteins of the VP7 complex from such cells. Hyperimmune sera also gave a virus-type-specific reaction in a solid-phase enzyme-linked immunoabsorbant assay and neutralised virus infectivity in standard plaque-reduction assays.

L141 ANSWER 33 OF 36 CAPLUS COPYRIGHT 1995 ACS

AN 1987:605155 CAPLUS
DN 107:205155
TI Methods and compositions useful in preventing equine influenza
IN Dale, Beverly; Cordell, Barbara
PA Biotechnology Research Partners, Ltd., USA
SO PCT Int. Appl., 63 pp.
CODEN: PIXXD2
PI WO 8607593 A1 861231
DS W: AU, DK, JP
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE
AI WO 86-US1343 860620
PRAI US 85-747020 850620
DT Patent
LA English
AB Vaccines against equine influenza virus (EIV) are prepd. by recombinant DNA techniques. Sequences encoding the hemagglutinin (HA) and neuraminidase (NA) glycoprotein surface antigens of EIV are inserted into nonessential portions of the vaccinia virus genome to produce the vaccine. The cDNA and corresponding amino acid sequences for HA subtypes H3 and H7 and for MA subtypes N7 and N8 are presented. Synthetic peptides based on these sequences are also prepd. by the Merrifield method for use in vaccines either as such or polymd. or attached to carrier proteins. The recombinant DNA sequences are also useful as diagnostic probes to detect the disease or to retrieve cDNA from fresh isolates of new strains generated by genetic drift to prep. new vaccines. Thus, cDNA libraries in pBR322 prepd. from total RNA of H7N7 and H3N8 strains of the virus were probed with cDNA prepd. from purified RNA for each of the antigens. The pos. clones were sequenced, subcloned into pGS20 contg. a vaccinia gene promoter and thymidine kinase gene, and the recombinant vectors were transfected into CV-1 cells infected with wild-type vaccinia virus. Recombinant virus was inoculated into human thymidine kinase-neg. cells, screened with 5-bromodeoxyuridine, and assayed for the presence of EIV genes. Pos. clones, when inoculated into horses, raised the titer of neutralizing anti-EIV antibodies in the serum.

L141 ANSWER 34 OF 36 BIOSIS COPYRIGHT 1995 BIOSIS
AN 85:351506 BIOSIS
DN BA80:21498
TI **INFLUENZA** VIRAL A-WSN-33 HEMAGGLUTININ IS EXPRESSED AND GLYCOSYLATED IN THE YEAST SACCHAROMYCES-CEREVISIAE.
AU JABBAR M A; SIVASUBRAMANIAN N; NAYAK D P
CS JONSSON COMPREHENSIVE CANCER CENTER, SCHOOL OF MEDICINE, UNIVERSITY OF CALIFORNIA AT LOS ANGELES, LOS ANGELES, CALIF. 90024.
SO PROC NATL ACAD SCI U S A 82 (7). 1985. 2019-2023. CODEN: PNASA6
ISSN: 0027-8424
LA English
AB Recombinant plasmids were constructed in which genes coding for either the entire or the signal-minus (amino acid residues 2-17 deleted) hemagglutinin (HA) of WSN **influenza** virus were placed under the control of the alcohol dehydrogenase I gene **promoter** of S. cerevisiae. Both recombinant plasmids were shown to direct the synthesis of HA-specific polypeptides that were detected by immunonoprecipitation with antiviral antibodies. The complete HA produced in yeast had an approximate MW of 70,000 and was glycosylated, as determined by the endoglycosidase H sensitivity, and

was bound to membrane. Therefor, the complete HA polypeptide possessing the signal sequence probably traversed the yeast secretory pathways. Signal-minus HA had a lower MW and was nonglycosylated. The specific binding of yeast HA with antiviral antibodies could be completely inhibited by **influenza** viral HA, demonstrating that the HA produced in yeast contained antigenic determinants of the native viral HA. [These results are relevant to the production of a HA subunit **influenza vaccine** by recombinat, **DNA** techniques].

L141 ANSWER 35 OF 36 MEDLINE
AN 86014396 MEDLINE
TI The hepatitis B virus.
AU Tiollais P; Pourcel C; Dejean A
NC CA97300-02
SO Nature, (1985 Oct 10-16) 317 (6037) 489-95. Ref: 111
Journal code: NSC. ISSN: 0028-0836.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LA English
FS Priority Journals; Cancer Journals
EM 8601
AB DNA recombinant technology has radically changed hepatitis B virus (HBV) virology. The genetic organization, **transcription** and replication of the virus are basically understood, structures of integrated HBV sequences in hepatocellular carcinoma have been characterized, and new **vaccines** produced by recombinant **DNA** technique are being developed.

L141 ANSWER 36 OF 36 CAPLUS COPYRIGHT 1995 ACS
AN 1983:433887 CAPLUS
DN 99:33887
TI Hepatitis B surface antigen in yeast
IN Hitzeman, Ronald A.; Levinson, Arthur D.; Yansura, Daniel G.
PA Genentech, Inc., USA
SO Eur. Pat. Appl., 45 pp.
CODEN: EPXXDW
PI EP 73657 A1 830309
DS R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE
AI EP 82-304513 820826
PRAI US 81-298236 810831
DT Patent
LA English
AB A Saccharomyces cerevisiae plasmid reactor contg. appropriate translational start and stop signals, a controlling **promoter** region, and the DNA sequence specifying hepatitis B virus surface antigen (HBsAg) is prepd. for use in vaccine prepns. Small DNA fragments from the yeast/bacteria shuttle plasmid pCV13 (contg. the Leu2 gene) were deleted and replaced with the modified 5' flanking **promoter** region from the 3-phosphoglycerate kinase (PGK) [9001-83-6] gene of yeast fused upstream to the DNA sequences for HBsAg. The use of the PGK **promoter** for direct expression of heterologous genes in yeast required the placement of an EcoRI restriction site on the 3' end of the PGK **promoter** fragment which does not contain the PGK initiator ATG codon. A **transcription** terminator **DNA** sequence from the

yeast TRP1 gene was inserted downstream from the HBsAg gene to terminate mRNA synthesis and provide polyadenylation signals for proper mRNA processing and translation. The yeast plasmid vector pYeHBs so constructed was then used to transform a yeast leucine auxotroph. After growth in a selective medium, transformants were phys. lysed with glass beads and HBsAg formation in the yeast ext. was measured by RIA. By immunol. and phys. criteria, the HBsAg formed by the yeast cells was similar to that produced by the native virus.

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L107       2283 SEA FILE=WPIDS TRANSCRIPTION
L115      14938 SEA FILE=WPIDS DNA
L116       6300 SEA FILE=WPIDS VACCINE#
L120        706 SEA FILE=WPIDS L115(3A)(L106 OR L107)
L121      10937 SEA FILE=WPIDS IMMUNI?
L122         16 SEA FILE=WPIDS L120(S)(L116 OR L121)
L123         10 SEA FILE=WPIDS ((VACCINE#/TI) OR (IMMUNI?/TI)) AND L122

=> d bib ab l123 1-10;fil hom

L123 ANSWER 1 OF 10  COPYRIGHT 1995 DERWENT INFORMATION LTD
AN   94-065703 [08]   WPIDS
CR   95-082234 [11]
DNC  C94-029543
TI   DNA construct comprising environmentally-induced promoter
     and DNA encoding two proteins linked by hinge region -
     pref. tetanus toxin C to enhance immunogenicity of second antigenic
     protein in transformed Salmonella, used in vaccines.
DC   B04 D16
IN   CHATFIELD, S N; DOUGAN, G; HORMAECHE, C E; KHAN, M A;
     VILLARREAL-RAMOS, B; CHATFIELD, S; HORMAECHE, C; KHAN, M
PA   (MEDE-N) MEDEVA HOLDINGS BV
CYC  44
PI   WO 9403615  A1 940217 (9408)* EN   89 pp
       RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA PT SE
        W: AT AU BB BG BR BY CA CH CZ DE DK ES FI GB HU JP KP KR KZ LK
           LU MG MN MW NL NO NZ PL PT RO RU SD SE SK UA US
     AU 9347193  A  940303 (9426)
     FI 9500396  A  950130 (9516)
     NO 9500348  A  950328 (9523)
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EP 652962 A1 950517 (9524) EN
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
ADT WO 9403615 A1 WO 93-GB1617 930730; AU 9347193 A AU 93-47193 930730; FI 9500396 A WO 93-GB1617 930730, FI 95-396 950130; NO 9500348 A WO 93-GB1617 930730, NO 95-348 950130; EP 652962 A1 EP 93-917957 930730, WO 93-GB1617 930730
FDT AU 9347193 A Based on WO 9403615; EP 652962 A1 Based on WO 9403615
PRAI GB 92-16317 920731; GB 93-6398 930326
AB WO 9403615 A UPAB: 950328
DNA construct comprises a promoter sequence operably linked to a DNA sequence encoding first and second proteins linked by a hinge region, where the promoter has activity which is induced in response to a change in the surrounding environment. Also claimed are: a replicable expression vector, suitable for use in bacteria, contg. the construct; a bacterium transformed with this vector; and a fusion protein comprising tetanus toxin fragment C or 1 or more of its epitopes, linked to a heterologous protein.
USE/ADVANTAGE - The first and second proteins are antigenic sequences derived from viruses, bacteria, fungi, yeasts or parasites. The first sequence is pref. tetanus toxin C or epitopes, known to have potent immunogenicity in Salmonella. These proteins can be used in the prepn. of vaccines against the pathogens. Such vaccines may comprise attenuated bacteria expressing these proteins, pref. double aro mutants of S. typhi or S. typhimurium. The flexible hinge region between the antigenic regions of the fusion protein allows protein formation to be maintained.
Dwg.0/14
Dwg.0/14

L123 ANSWER 2 OF 10 COPYRIGHT 1995 DERWENT INFORMATION LTD
AN 93-320749 [40] WPIDS
DNC C93-142795
TI Inoculation with **DNA transcription** unit - useful for **immunisation**, contraception or tumour therapy.
DC B04 D16
IN FYNAN, E F; ROBINSON, H L; WEBSTER, R G
PA (UYMA-N) UNIV MASSACHUSETTS MEDICAL CENT
CYC 19
PI WO 9319183 A1 930930 (9340)* EN 41 pp
RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
W: CA JP
EP 633937 A1 950118 (9507) EN
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
ADT WO 9319183 A1 WO 93-US2394 930317; EP 633937 A1 EP 93-907536 930317, WO 93-US2394 930317
FDT EP 633937 A1 Based on WO 9319183
PRAI US 92-855562 920323; US 93-9833 930127
AB WO 9319183 A UPAB: 931129
Prod. for use in vertebrate therapy, e.g. **immunisation**, contraception or tumour therapy, and comprising a **DNA transcription** unit, comprises **DNA** encoding a required therapeutic agent operatively linked to a promoter region.
Also claimed are use of a **DNA transcription** unit comprising **DNA** encoding a required antigen oepratively linked to a promoter region for the mfr. of a medicament for use in vertebrate **immunisation** by eliciting a humoral immune response, a cell-mediated immune response or both against the

antigen; the method of **immunising** the vertebrate with the **DNA transcription** unit, pref. by admin. to a mucosal (e.g. nasal) surface.

USE/ADVANTAGE - The technology is used for the development of highly effective subunit vaccines. Immunisation can be accomplished for any antigen encoded by DNA. The DNA encoded antigens are expressed as "pure" antigens in their native states and have undergone normal host cell modifications.

Dwg.0/5

L123 ANSWER 3 OF 10 COPYRIGHT 1995 DERWENT INFORMATION LTD
AN 92-132130 [16] WPIDS
DNC C92-061883
TI Multiple promoter baculovirus expression system and defective particle - allowing safe and inexpensive prodn. of **vaccines** and diagnostics.
DC B04 C06 D16
IN OKER-BLOM, C E G; SUMMERS, M D; OKER-BLOM, C E; OKERBLOM, C E G
PA (TEXA) UNIV TEXAS A & M SYSTEM
CYC 33
PI WO 9205264 A 920402 (9216)* EN 85 pp
RW: AT BE CH DE DK ES FR GB GR IT LU NL SE
W: AT AU BB BG BR CA DE DK FI GB HU JP KP KR LK LU MG MN MW NL NO PL RO SE SU
AU 9187516 A 920415 (9230)
US 5169784 A 921208 (9252) 29 pp
EP 549721 A1 930707 (9327) EN 85 pp
R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE
BR 9106859 A 930824 (9339)
JP 06500920 W 940203 (9410) 25 pp
EP 549721 B1 940413 (9415) EN 33 pp
R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE
DE 69101713 E 940519 (9421)
ES 2054508 T3 940801 (9432)
ADT WO 9205264 A WO 91-US6722 910917; AU 9187516 A AU 91-87516 910917, WO 91-US6722 910917; US 5169784 A US 90-583392 900917; EP 549721 A1 EP 91-918840 910917, WO 91-US6722 910917; BR 9106859 A BR 91-6859 910917, WO 91-US6722 910917; JP 06500920 W JP 91-517192 910917, WO 91-US6722 910917; EP 549721 B1 EP 91-918840 910917, WO 91-US6722 910917; DE 69101713 E DE 91-601713 910917, EP 91-918840 910917, WO 91-US6722 910917; ES 2054508 T3 EP 91-918840 910917
FDT AU 9187516 A Based on WO 9205264; EP 549721 A1 Based on WO 9205264; BR 9106859 A Based on WO 9205264; JP 06500920 W Based on WO 9205264; EP 549721 B1 Based on WO 9205264; DE 69101713 E Based on EP 549721, Based on WO 9205264; ES 2054508 T3 Based on EP 549721
PRAI US 90-583392 900917
AB WO 9205264 A UPAB: 931006
A recombinant baculovirus expression vector (I) comprises a baculovirus genome with the following components directionally positioned from left to right, and in an appropriate recording frame; (1) a DNA region comprising a first promoter region derived from a baculovirus early gene; (2) a DNA region encoding a desired protein or portion of it; (3) a DNA region comprising a second promoter region derived from a baculovirus late gene; and (4) a DNA region encoding a desired protein or portion of it.

Also claimed are (a) a bacterial transfer vector (II) comprising a bacterial plasmid with the following components

directionally positioned, from left to right, and in an appropriate reading frame; (i) 5' viral flanking sequences; (ii) a DNA region comprising a promoter region derived from a baculovirus early gene; (iii) a cDNA sequence encoding for a non-structural viral gene; and (iv) 3' viral flanking sequences.

USE/ADVANTAGE - The virus (hybrid) (e.g. animal or human pathogen) is not capable of replicating itself but is essentially identical to the authentic pathogen in terms of structure and antigenicity. It is capable of temporal regulation and successive synthesis of non-structural and structural proteins. The new construct enables the design and construction of virus particle or virus hybrid with specific antigenic properties which further allows for the safe and inexpensive prodn. of vaccines or diagnostics. (0/11)

0/11

L123 ANSWER 4 OF 10 COPYRIGHT 1995 DERWENT INFORMATION LTD
AN 92-096889 [12] WPIDS
TI Recombinant pox-virus e.g. vaccinia, fowl-pox and canary-pox virus - contg. DNA from flavi-virus e.g. Japanese encephalitis and yellow fever virus, used as **vaccine**.
DC B04 C06 D16
IN PAOLETTI, E; PINCUS, S E; PINC
PA (VIRO-N) VIROGENETICS CORP
CYC 4
PI WO 9203545 A 920305 (9212)* 117 pp
W: AU GB JP KR
AU 9187287 A 920317 (9226)
GB 2269820 A 940223 (9406) 2 pp
JP 06503227 W 940414 (9420) 42 pp
GB 2269820 B 950329 (9516)
AU 657711 B 950323 (9519)
ADT WO 9203545 A WO 91-US5816 910805; AU 9187287 A AU 91-87287 910815, WO 91-US5816 910815; GB 2269820 A WO 91-US5816 910815, GB 93-3023 930215; JP 06503227 W JP 91-516619 910815, WO 91-US5816 910815; GB 2269820 B WO 91-US5816 910815, GB 93-3023 930215; AU 657711 B AU 91-87287 910815
FDT AU 9187287 A Based on WO 9203545; GB 2269820 A Based on WO 9203545; JP 06503227 W Based on WO 9203545; GB 2269820 B Based on WO 9203545; AU 657711 B Previous Publ. AU 9187287, Based on WO 9203545
PRAI US 90-567960 900815; US 91-711429 910606; US 91-714687 910613; US 91-729800 910717
AB WO 9203545 A UPAB: 931006
A recombinant poxvirus which generates an extracellular flavivirus structural protein capable of inducing protective immunity against flavivirus is new. In partic. the poxvirus generates an extracellular particle contg. flavirus E and M proteins which is capable of inducing neutralising antibodies (Abs), haemagglutination-inhibiting Abs and protective immunity against flavivirus infection. The DNA encoding the proteins is inserted into a nonessential region of the poxvirus genome.

The following recombinant pox viruses are claimed: (a) contg. JEV structural genes vP650, vP555, vP658, vP583, vP825, vP829, vP857, vP864, vP908 and vP923; (b) contg. yellow fever virus structural genes vP725, vP729, vP764, vP766, vP869, vP984, vP997, vP1002 and vP1003; (c) contg. Dengue virus structural genes: vP867, vP955, and vP962; (d) vCP107, a canarypox virus contg. JEV

structural genes, and (e) vCP127, a cananpox virus contg. yellow fever virus structural genes.

USE/ADVANTAGE - The recombinant pox viruses produce properly processed forms of the flavivirus proteins which can be used to prepare vaccines for protection against e.g. Japanese encephalitis virus (JEV), yellow fever virus and Dengne virus

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L123 ANSWER 5 OF 10 COPYRIGHT 1995 DERWENT INFORMATION LTD
AN 91-134493 [19] WPIDS
DNC C91-057931
TI New transformed Bordetella strains - contain **DNA** contg. **promoter** regions encoding an immunogenic peptide used for a **vaccine** against B. pertussis strains.
DC B04 D16
IN CUZZONI, A; DEFERRA, F; GRANDI, G; PEDRONI, P; RIBOLI, B; DE, FERRA F
PA (ENIE) ENIRICERCHE SPA
CYC 15
PI EP 426059 A 910508 (9119)*
R: AT BE CH DE ES FR GB GR LI LU NL SE
CA 2029146 A 910504 (9128)
IT 1236971 B 930507 (9340)
US 5395764 A 950307 (9515) 21 pp
ADT EP 426059 A EP 90-120679 901029; IT 1236971 B IT 89-22252 891103; US 5395764 A Cont of US 90-607966 901031, US 94-213811 940316
PRAI IT 89-22252 891103
AB EP 426059 A UPAB: 930928
Promoter regions of genes encoding the pilinic subunits fim 2, fim X and fim 3 of Bordetella pertussis are new. The regions comprise the following nucleotide sequences, respectively:

1) TGTTTCCCACA TCGGAATCAG CCCCCCCCCCCCCCCCCTAAGAT CTAAGSTCGTGGCTCCAT

2) AAATTCCTACA CATCCCATCAG CCCCCCCGAGGCGTCTAATAAT CTTGCACACACAT

3) AAATTCCCACA CAACVCCATCAG CCCCCCCCCCGGACCTGATT CTGATGG CTGATGGCCGACGCCAAGCACAT.

Also claimed are a cloning vector contg. the promoter region or its fragments, microorganisms transformed with the cloning vector selected from E.coli, Bacillus or Bordetella and a recombinant DNA mol. encoding an immunogenic protein of B. pertussis. The immunogenic protein may be a pilinic subunit, pertussis toxin or its subunits, haemagglutinin filamentosa, adenylate cyclase or the protein 69K.

USE/ADVANTAGE - A strain of B. pertussis contg. the recombinant DNA mol. is used as a **vaccine** against infections caused by serotypically different B. pertussis strians. The **DNA** contains the **promoter** regions which regulate expression of the immunogenic protein. Undesirable side effects e.g. simple weals, erythema, fever, convulsions and brain damage are avoided.

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L123 ANSWER 6 OF 10 COPYRIGHT 1995 DERWENT INFORMATION LTD
AN 91-022237 [03] WPIDS
DNC C91-009575
TI Recombinant mycobacterium - comprising **DNA** and **promoter** for prodn. of **vaccines** against tuberculosis, leprosy etc..

DC B04 D16
IN ALDOVINI, A; YOUNG, R A
PA (WHED) WHITEHEAD INST BIOMEDICAL RES; (WHED) WHITEHEAD INST BIOMEDICAL RES
CYC 16
PI WO 9015873 A 901227 (9103)*
RW: AT BE CH DE DK ES FR GB IT LU NL SE
W: AU CA JP
AU 9058480 A 910108 (9116)
EP 478664 A 920408 (9215) 43 pp
R: AT BE CH DE DK ES FR GB IT LI LU NL SE
JP 04506297 W 921105 (9251) 12 pp
ADT JP 04506297 W JP 90-509244 900618, WO 90-US3451 900618
FDT EP 478664 A Based on WO 9015873; JP 04506297 W Based on WO 9015873
PRAI US 89-367894 890619
AB WO 9015873 A UPAB: 941115
A recombinant mycobacterium is claimed comprising DNA and a regulation promoter region which are integrated into the DNA of the mycobacterium. The micoorganism is especially BCG. Other mycobacterium claimed include Mycobacterium Smegmatis, avium, phlei, fortuitum, lufu, paratuberculosis, habama, scrofulaceum, intracellulare, tuberculosis or their variants. The DNA encodes one of the following:-antigens, enzymes, lymphokines, immunopotentiators and reporting molecules.

A claimed integration vector comprises DNA homologous to DNA in the mycobacterial genome, **DNA** encoding a regulated **promoter** region (specifically a heat shock protein **promoter** region), **DNA** encoding a selectable marker and DNA encoding the protein to be expressed. A **vaccine** and its methods of preparation are also claimed.

USE/ADVANTAGE - The recombinant mycobacterium is for use in vaccines e.g., against tuberculosis, leprosy etc. @(43pp Dwg.No.0/0)tor

L123 ANSWER 7 OF 10 COPYRIGHT 1995 DERWENT INFORMATION LTD
AN 90-239051 [31] WPIDS
DNC C90-103396
TI **Promoter DNA** derived from avipox virus, and chimera gene - can be used to produce recombinant avipox virus for **vaccine** manufacture.
DC B04 C03 D16
IN OGAWA, R; OHKAWA, S; SAEKI, S; YANAGIDA, N
PA (JAPG) NIPPON ZEON KK
CYC 13
PI WO 9007581 A 900712 (9031)*
RW: AT BE CH DE FR GB IT LU NL SE
W: AU JP KR
AU 9048240 A 900801 (9042)
JP 02501646 X 901206 (9104)
EP 419666 A 910403 (9114)
R: DE FR IT
KR 9401265 B1 940218 (9502)
EP 419666 A4 910515 (9516)
ADT EP 419666 A EP 90-901019 891228; KR 9401265 B1 WO 89-JP1330 891228, KR 90-701934 900829; EP 419666 A4 EP 90-901019
PRAI JP 88-335605 881229; JP 89-76025 890328
AB WO 9007581 A UPAB: 950322

A new DNA fragment having promoter action (base sequence is given) is derived from an avipox virus (related to fowl pox virus). Also claimed is a chimera gene formed by joining this promoter sequence to an exogenous gene coding for a polypeptide, pref. for a viral antigen such as a Newcastle disease antigen (e.g. a haemagglutininn neuraminidase). A plasmid containing this chimera gene can be used to form a transformant organism, which when infected with avipox virus produces a recombinant avipox virus carrying the exogenous gene.

USE/ADVANTAGE - The recombinant avipox virus can be used to produce a stabilised vaccine on a large scale for prophylaxis of avipox diseases. @(77pp Dwg.No.0/20)

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L123 ANSWER 8 OF 10 COPYRIGHT 1995 DERWENT INFORMATION LTD
AN 89-130047 [17] WPIDS
CR 83-707055 [28]; 88-056484 [08]; 92-175125 [21]; 92-268664 [32]; 93-026900 [03]
DNC C89-057575
TI Antigen expression in vertebrates using recombinant virus - contg. specific DNA and incapable of replication, esp. avipox, useful as safe, live **vaccines**.
DC B04 C03 D16
IN PAOLETTI, E
PA (HEAL-N) HEALTH RES INC
CYC 22
PI WO 8903429 A 890420 (8917)* EN 89 pp
RW: AT AU BG BR CH DE DK GB HU JP KP KR LU NL NO SE SU
FR 2621487 A 890414 (8922)
NL 8820679 A 890703 (8930)
ZA 8806415 A 890426 (8931)
AU 8824275 A 890502 (8932)
DK 8902036 A 890627 (8937)
GB 2217718 A 891101 (8944)
DE 3890874 T 891221 (9001)
JP 02500879 W 900329 (9019)
BE 1002134 A 900724 (9032)
GB 2217718 B 920520 (9221)
CH 679933 A 920515 (9225)
CH 679934 A 920515 (9225)
IT 1229484 B 910903 (9232)
IL 87581 A 930922 (9349)
ADT WO 8903429 A WO 88-US2816 880824; FR 2621487 A FR 88-11334 880829; NL 8820679 A NL 88-20679 880824; ZA 8806415 A ZA 88-6415 880829; GB 2217718 A GB 88-8921 880824; DE 3890874 T DE 88-3890874 880824; JP 02500879 W JP 87-507715 870824; BE 1002134 A BE 88-978 880829; GB 2217718 B WO 88-US2816 880824, GB 89-8921 880824; CH 679933 A WO 88-US2816 880824, CH 89-1652 880824; CH 679934 A Div ex CH 89-1652 880824, CH 91-1444 880824; IT 1229484 B IT 88-21772 880829; IL 87581 A IL 88-87581 880828
FDT GB 2217718 B Based on WO 8903429; CH 679933 A Based on WO 8903429
PRAI US 87-90711 870828; US 87-110335 871020; US 88-186054 880425; US 88-234390 880823; US 87-90771 870828
AB WO 8903429 A UPAB: 950301
A gene product (i) is expressed in a vertebrate by inoculating with a recombinant virus contg. DNA which encodes and expresses (I) without productive replication of virus in the host. Also new are

(1) recombinant avipox virus contg. DNA from a non-avipox source in a non-essential region of its genome; (2) recombinant poxvirus contg. DNA from any source under control of an ontomopox promoter, and (3) recombinant vaccinia virus contg. DNA from any source under control of an avipox promoter. Specifically the virus is fowlpox or canary pox virus, and is inoculated by subcutaneous intradermal, intramuscular or oral methods, or into an egg.

USE/ADVANTAGE - (I) is esp. an antigen and inoculation then induces an immune response. These modified viruses have the advantages (high efficiency) of live vaccines but do not carry the risk of causing an infection.

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Dwg.0/0

L123 ANSWER 9 OF 10 COPYRIGHT 1995 DERWENT INFORMATION LTD
AN 88-360972 [50] WPIDS
CR 87-342118 [48]
DNC C88-159729
TI Raccoon pox virus-rabies virus recombinant(s) - uses for prodn. of **vaccines** to control rabies or for detecting presence of rabies.
DC A96 B04 C03 D16
IN BAER, G M; ESPOSITO, J J
PA (USSH) US DEPT HEALTH & HUMAN SERVICES; (USSH) US DEPT HEALTH & HUMAN SERVICE
CYC 1
PI US 7198213 A 881101 (8850)* 27 pp
US 5266313 A 931130 (9349) 8 pp
ADT US 7198213 A US 88-198213 880525; US 5266313 A CIP of US 87-10424 870203, Cont of US 88-198213 880525, US 92-829597 920203
PRAI US 87-10424 870203; US 88-198213 880525; US 92-829597 920203
AB US 7198213 A UPAB: 941115

A raccoon poxvirus is used as a substrate for insertion and expression of a segment of a rabies virus nuceotide coding sequence to provide live vectored raccoon poxvirus: rabies virus recombinants.

Infections raccoon poxvirus recombinants for expressing rabies virus surface spike glycoprotein (G) were produced by plasmids previously used for prodn. of vaccinia virus recombinants by thymidine kinase (TK) insertional inactivation.

USE - The recombinant vectored viruses can be used for the prodn. of oral or injectable vaccines for wildlife, livestock or companion animals to control rabies and for the prodn. of related biochemical and immunobiological reagents, e.g. kits for detecting the presence of rabies.

Dwg.0/2

Dwg.0/2

L123 ANSWER 10 OF 10 COPYRIGHT 1995 DERWENT INFORMATION LTD
AN 88-100000 [15] WPIDS
DNC C88-044777
TI Prodn. of recombinant vaccinia virus **vaccine** - by inserting **promoter** and heterogeneous **DNA** in close proximity into an attenuated Lister mutant strain.
DC B04 D16
IN GOTO, H; KAMOGAWA, K; KOBAYASHI, H; KOJIMA, A; MORITA, M; SAEKI, S; WATANABE, K; YASUDA,

PA (NAIN-N) NAT INST OF HEALTH; (NARE-N) NAT RES INST HEALTH; (JAPG) NIPPON ZEON KK
CYC 8
PI EP 263591 A 880413 (8815)* EN 24 pp
R: CH DE FR GB LI NL
JP 63063381 A 880319 (8817)
CN 87106793 A 880720 (8930)
ADT EP 263591 A EP 87-307693 870901; JP 63063381 A JP 86-208772 860904
PRAI JP 86-208772 860904
AB EP 263591 A UPAB: 930923
Prodn. includes growing in a host a recombinant vaccinia virus (VV) obtd. by inserting DNA having promoter function and heterogenous DNA which can be expressed under its control, in close vicinity to each other into a non-essential DNA region of an attenuated Lister temp.-sensitive mutant VV strain.

Pref. the mutant strain is not growable at high temps.. in rabbit kidney cells and has a small pock size on the chorioallantoic membrane of an embryonated egg. The host is pref. a white rabbit.

ADVANTAGE - As compared with a recombinant obtd. by using the WR strain as parent strain, the recombinant shows a much higher output of heterogenous protein per infected cell, though it has a lower virus infectivity titre. The recombinant UV does not lose its growability when inoculated into a mammal, can assure sufficient expression of the heterogenous DNA and permit prodn. of antibody and is excellent in safety.
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fil uspat
FILE 'USPAT' ENTERED AT 16:38:33 ON 28 JUN 95

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  *              W E L C O M E   T O   T H E                      *
  *         U. S.   P A T E N T   T E X T   F I L E               *
  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

=> e robinson, har/in
E49          1     ROBINSON, GUY DESBOROUGH/IN
E50          1     ROBINSON, H ENGLISH JR/IN
E51          0 --> ROBINSON, HAR/IN
E52          1     ROBINSON, HAROLD J/IN
E53          1     ROBINSON, HAROLD L/IN
E54          2     ROBINSON, HAROLD R/IN
E55          1     ROBINSON, HARRY C/IN
E56          1     ROBINSON, HARRY D JR/IN
E57          1     ROBINSON, HARRY J/IN
E58          1     ROBINSON, HARRY R/IN
E59          1     ROBINSON, HARRY W/IN
E60          1     ROBINSON, HELEN M/IN

=> e fynan, e/in
E61          4     FYMAT, ALAIN L/IN
E62          1     FYNAN, BARBARA/IN
E63          0 --> FYNAN, E/IN
E64          1     FYNBO, HARTMAN/IN
E65          3     FYNBO, KNUD HANSEN/IN
E66          1     FYNN, ROBERT P/IN
E67          1     FYOCK, NORMAN G/IN
E68          1     FYODOROV, SVYATOPLAY N/IN
E69          4     FYODOROV, SVYATOSLAV N/IN
E70          1     FYOT, JEAN JACQUES/IN
E71          1     FYRK, CLAS O F/IN
E72          1     FYSH, STUART A/IN

=> d que l2
L2           2 SEA FILE=USPAT "WEBSTER, ROBERT G"/IN

=> d l2 1-2;d que l3

1.  4,552,758, Nov. 12, 1985, Human use of avian-human reassortants as
vaccines for influenza A virus; Brian R. Murphy, et al., 424/206.1,
209.1; 435/235.1 [IMAGE AVAILABLE]

2.  4,552,757, Nov. 12, 1985, Use in an animal host and precursors for
vaccines utilizing avian-human reassortants to combat influenza A virus;
Brian R. Murphy, et al., 424/206.1, 209.1; 435/235.1 [IMAGE AVAILABLE]


L3           2 SEA FILE=USPAT "LU, SHAN J"/IN

=> d l3 1-2; d que l4

1.  5,237,295, Aug. 17, 1993, Printed networks for improving electrical
isolation at high frequencies; Donald W. Reddick, et al., 333/131, 119,
124 [IMAGE AVAILABLE]

2.  5,096,444, Mar. 17, 1992, Flat F-port connector;  Shan J. Lu  , et
al., 439/750, 578 [IMAGE AVAILABLE]
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L4 7 SEA FILE=USPAT DNA VACCINE#

=> d cit fd ab l4 1-7; fil hom

1. 5,244,792, Sep. 14, 1993, Expression of recombinant glyoprotein B from herpes simplex virus; Rae L. Burke, et al., 435/69.3; 424/186.1, 231.1; 435/69.1, 70.3, 71.1, 172.3, 240.2, 254.2, 320.1; 536/23.72; 935/12, 69, 70 [IMAGE AVAILABLE]

US PAT NO: 5,244,792 [IMAGE AVAILABLE] L4: 1 of 7
DATE FILED: Sep. 20, 1990

ABSTRACT:
The glycoprotein B ("gB") and functional fragments thereof are provided by recombinant DNA technology. Oligonucleotide sequences are provided coding the glycoprotein, its precursor and fragments thereof. Methods and compositions are disclosed for the production of the glycoprotein and functional fragments thereof as well as oligonucleotide sequences, which may be used for probes or other applications, and particularly may be used for vaccines. The following E. coli HB101 strains were deposited at the A.T.C.C. on April 4, 1984, where the plasmid indicates the plasmid employed to transform the strain; pHS112; pHS114 (gB1 mammalian); pHS127A (gB1 yeast); pHS203; and pHS206 (gB2), and assigned Accession Nos. 39649-39653, respectively, where the nature of the plasmid is indicated in parentheses and the number refers back to the number employed in the Experimental section.

2. 5,240,705, Aug. 31, 1993, Haemophilus paragallinarum vaccine; Antonius A. C. Jacobs, 424/164.1, 256.1, 826 [IMAGE AVAILABLE]

US PAT NO: 5,240,705 [IMAGE AVAILABLE] L4: 2 of 7
DATE FILED: Aug. 29, 1991

ABSTRACT:
The invention is concerned with a vaccine for the protection of poultry against Haemophilus paragallinarum infection.
Chickens vaccinated with a membraneous fraction of H. paragallinarum cells comprising a 38 kD outer-membrane protein are well protected against infection.

3. 5,004,608, Apr. 2, 1991, Amebiasis vaccine; Jonathan I. Ravdin, et al., 424/266.1, 269.1; 530/396 [IMAGE AVAILABLE]

US PAT NO: 5,004,608 [IMAGE AVAILABLE] L4: 3 of 7
DATE FILED: Dec. 29, 1989

ABSTRACT:
Purified Gal/GalNAc adherence lectin of Entamoeba histolytica is used for development of a vaccine to prevent human amebiasis.

4. 4,996,152, Feb. 26, 1991, Avian herpesvirus amplicon as a eucaryotic expression vector; Jeanne K. Carter, et al., 435/172.3, 172.1, 235.1, 237, 320.1; 536/23.5, 23.72 [IMAGE AVAILABLE]

US PAT NO: 4,996,152 [IMAGE AVAILABLE] L4: 4 of 7
DATE FILED: Dec. 4, 1987

ABSTRACT:

DNA fragments (seeds) having the characteristics of amplicons, which are useful for amplifying genes of interest, have been isolated from Marek's disease viruses of poultry. Concatmers of the seeds and the associated genes have potential as vaccines or delivery vectors when cotransfected and replicated in the presence of helper viruses. The amplicons are also useful for inserting associated genes into the helper viruses, which in turn could be used as expression vectors. Candidate genes for use with the subject amplicons include those which encode immunogenic proteins and other beneficial economic traits desired in commercial poultry lines.

5. 4,895,718, Jan. 23, 1990, Serotype 2 Marek's disease vaccine; Richard L. Witter, 424/202.1, 229.1, 816; 435/172.1, 237, 948; 935/63, 65, 70 [IMAGE AVAILABLE]

US PAT NO: 4,895,718 [IMAGE AVAILABLE] L4: 5 of 7
DATE FILED: Jul. 10, 1987

ABSTRACT:
A serotype 2 Marek's disease vaccine comprising a cloned strain designated as 301B/1 has been derived from a field isolate. This strain is characterized by superior levels of replicative ability and protectivity in chickens as compared to existing commercial serotype 2 strains, and it is virtually nonpathogenic. 301B/1 is particularly useful in the formulation of highly efficacious bivalent and polyvalent vaccines.

6. 4,895,717, Jan. 23, 1990, Revertant serotype 1 Marek's disease vaccine; Richard L. Witter, 424/229.1, 816; 435/172.1, 237, 948; 935/63, 65, 70 [IMAGE AVAILABLE]

US PAT NO: 4,895,717 [IMAGE AVAILABLE] L4: 6 of 7
DATE FILED: Jul. 10, 1987

ABSTRACT:
A Marek's disease vaccine comprising either a revertant virus derived by backpassaging an attenuated serotype 1 Md11 virus or an antigenic component of the virus is characterized by increased levels of replicative ability and protectivity in chickens as compared to the original attenuated strain. Revertants of the invention are exemplified by a clone identified as Md11/75C/R2 and can be formulated into monovalent and polyvalent vaccines.

7. 4,735,800, Apr. 5, 1988, Vaccines against rift valley fever virus; Marc S. Collett, et al., 424/186.1, 204.1; 435/69.3, 172.3, 252.33, 849; 530/806; 536/23.7, 23.72, 24.1; 930/220; 935/22, 65 [IMAGE AVAILABLE]

US PAT NO: 4,735,800 [IMAGE AVAILABLE] L4: 7 of 7
DATE FILED: Aug. 23, 1984

ABSTRACT:
Methods and compositions are provided for the cloning and expression of Rift Valley Fever Virus genes in single cell host organisms. Also described are methods for culturing these novel single-cell organisms to produce Rift Valley Fever Virus gene gene products which may be formulated for use as products which may be formulated for use as immunogens in vaccines to protect against Rift Valley Fever Virus infections.

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